



SALWAN PUBLIC SCHOOL

Sector-15 (II), Gurugram

Holiday Home Work

(2019-20)

CLASS – IX

English

Task-1

“Reading is essential for those who seek to rise above the ordinary.”

By: Jim Rohn

Summer break is the best time to quench our thirst to read; to read to enrich our knowledge and creativity. Here is a suggestive list of extensive reading. Choose any one and read, enjoy and enrich yourself!

Classics:

- Animal Farm
- The Diary of a Young Girl
- Bridge to Terabithia
- Great Expectations

Contemporary:

- The Book Thief
- A Prayer For Owen Meany
- The Fault in Our Stars
- The Curious Incident of the Dog in the Night Time

Task-2:

Read and revise the prose and poetry given in your textbooks for the months of April and May. Create a colourful crossword based on 15 difficult words from the above mentioned text. Add illustrations to cues given in the crosswords. The task is to be creatively designed on A-3sized sheet.

Task-3:

Revise grammatical concepts for integrated grammar and attempt the exercises given in the Assignment. The answers are to be written in the Grammar notebook.

Assignment (English)

Exercise 1: Gap Filling:

Q.1. Complete the following passage with the most appropriate words from the options given.

An ATM, or Automated Teller is 1..... (a, an, the, no word) simple machine which 2..... (acting, acted, acts, is acted) as an extension of a bank even 3..... (as, which, when, where) the bank is closed. The machine 4..... (was, is, has been, should be) usually placed 5..... (at, of, in, on) a small room with a security guard stationed outside. You can 6..... (withdraw, withdrawal, withdrawn, withdrew) money from your account, deposit cheques, order 7..... (a, an, the, no word) cheque book, get 8..... (my, our, somebody's, your) account statements etc. The ATMs work round the year 24 hours a day.

Q.2. There are several ways to deal1..... (in / with / to) the tendency to procrastinate.

Break2..... (off / out / down) the task into manageable pieces and knock them3... (out / off / up) one at one time. Focus4..... (at / on / over) accomplishing what's right in front of you5..... (in / at / on) this moment. Planning ahead6... (of / for / to) the next year may seem overwhelming for some people. So take just one day7..... (in / at) a time. Don't look any further ahead8..... (than / then) that.

Set a time frame9..... (to / for) accomplishing the task. You'll be surprised – just by thinking10.....(across / through / along) and planning you're setting11..... (you / yourself) to accomplish the goal unconsciously and you may even beat your own deadline!

We know how important writing is12..... (for / to / with) goal setting. It is equally important to13..... (beat / beating) procrastination. Keep a diary of your activities. It forces you to see14..... (what / that) you're actually doing, and what you're not doing. Be aware15..... (of / off) the distractions, detours, and downright wastes of time you engage16..... (on / in / with) during the course of a day. Once you are aware of these distractions, you can work towards getting rid17..... (of / off) them. Try it. It works!

Exercise 2: Jumbled Sentences

Q.1. Rearrange the following words and phrases to make meaningful sentences. The first one has been done as an example.

- (a) where / unproductive work / check / you are / in / wasting time
- (b) self-study / availability of time / for / check
- (c) to complete / you need / judge / the syllabus / how much time
- (d) for / allocate time / as per / different subjects / the need

Q.2. Rearrange the following words or phrases to form meaningful sentences. The first one has been done for you.

a) railway station / my parents / one evening / along with / to the / I went

b) crowd at / counter / there was / the ticket / a huge

(c) their voices / at the / the hawkers / top of / were shouting

(d) arrived / started / compartment / the passengers / from one / running / to another / the train / and

Exercise 3 : Editing / Omission

Q.1. The following passage has not been edited. There is one error in each of the lines. Write the incorrect word and the correction in your answer sheet as given below against the correct blank number. Remember to underline the word you have supplied.

	Incorrect.	Correct
Newton had a little dog name Diamond name	name	named
One day when he is fifty years	(a)	
old, he went out of his room, left the	(b)	
dog asleep. On the table lie his	(c)	
papers. They contained all the discovery which	(d)	
he had made while the last twenty years. When	(e)	
he was gone, down rose little Diamond. He	(f)	
jumped upon the table and overthrow the lighted	(g)	
candle. The papers caught fire. They were reduce	(h)	
to a heap of ashes.		

Q.2. The following passage has not been edited. There is one error in each line. Identify the error and write it along with the correction in the answer sheet. The first one has been done for you as an example.

During a summer holidays I accompanied my	a (incorrect) / the
(correct)	
friend from his village. It was a small place consisting	(a)
of about 200 houses. The villagers are simple people	(b)
and very hospitable. The natural scenery or fresh	(c)
air were very soothing. I stayed here for three days	(d)
and enjoyed myself in the lap of nature	

Q.3. The following passage has not been edited. There is an error in each line against which a blank is given. Write the incorrect word and the correction in your answer sheet against the correct blank number. The first one has been done for you as an example.

		Incorrect	Correct
An inter-school football match is been	eg.	been	being
organised among our school and City	(a)
Montessori School. The match will be playing	(b)
on 18th March on are school grounds	(c)
since 5 p.m. onwards.	(d)

हिन्दी

पाठ्यक्रम में सम्मिलित निम्न कवियों एवं लेखकों का सम्पूर्ण जीवन परिचय , शिक्षा एवं रचनाएँ आदि का ए 3 शीट पर सचित्र एवं विस्तृत वर्णन अनुक्रमांक अनुसार करें-

अनुक्रमांक	कवि एवं लेखक
1- 10	रैदास एवं यशपाल
11- 20	रहीम एवं महादेवी वर्मा
21- 30	हरिवंशराय बच्चन एवं मधुकर उपाध्याय
31- 40	अरुण कमल एवं श्री राम शर्मा

French

- ❖ Complétez les exercices d'articles et d'adjectifs marqués dans le livre

<<Get Ready with class IX>>

- ❖ Conjuguez les – er verbes
 - ir verbes
 - re verbes

Mathematics

Prepare an article on A-3 sheet on the topic '**Mathematics in Everyday Life**'. Students will make the article on the following subtopics according to their Roll numbers

- | | |
|-------------------|----------------|
| 1. Nature | Roll no. 1-5 |
| 2. Architecture | Roll no. 6-10 |
| 3. Music | Roll no. 11-15 |
| 4. Sports | Roll no. 16-20 |
| 5. Hotel Industry | Roll no. 21-25 |
| 6. Medicine | Roll no. 26-30 |
| 7. Shopping | Roll no. 31-37 |

Assignment

The answers of the following questions are to be solved in Mathematics Practice notebooks.

- 1) If $x = 5 - 2\sqrt{6}$, find $x^2 + \frac{1}{x^2}$.
- 2) If $a = \frac{\sqrt{3} - \sqrt{2}}{\sqrt{3} - \sqrt{2}}$ and $b = \frac{\sqrt{3} + \sqrt{2}}{\sqrt{3} - \sqrt{2}}$ then find the value of $a^2 + b^2 + ab + 1$.
- 3) If $\frac{\sqrt{5} + 1}{\sqrt{5} - 1} + \frac{\sqrt{5} - 1}{\sqrt{5} + 1} = a + b\sqrt{5}$, find the value of a and b .
- 4) Simplify:
$$4\sqrt{72} - \sqrt{50} - 7\sqrt{128}$$

5) Prove that: $\frac{a^{-1}}{a^{-1} + b^{-1}} + \frac{a^{-1}}{a^{-1} - b^{-1}} = \frac{2b^2}{b^2 - a^2}$

6) If x, y, z are positive real numbers then show that $(x^{-1} y)^{\frac{1}{2}} \cdot (y^{-1} z)^{\frac{1}{2}} \cdot (z^{-1} x)^{\frac{1}{2}} = 1$.

7) Find the value of $\sqrt[4]{\sqrt[3]{2^2}}$.

8) If $x = 2\sqrt{6} + 5$, find:

(i) $x + \frac{1}{x}$

(ii) $x - \frac{1}{x}$

9) Simplify:

$$\left[5 \left(8^{\frac{1}{3}} + 27^{\frac{1}{3}} \right)^3 \right]^{\frac{1}{4}}$$

10) If $x = 3 + \sqrt{8}$, find the value of $x^4 + \frac{1}{x^4}$.

11) If $x = \frac{\sqrt{2} + 1}{\sqrt{2} - 1}$, $y = \frac{\sqrt{2} - 1}{\sqrt{2} + 1}$, find the value of $x^2 + xy + y^2$.

12) Find the value of x , if $5^{x-3} \cdot 3^{2x-8} = 225$.

13) Prove that $\frac{1}{1 + \sqrt{2}} + \frac{1}{\sqrt{2} + \sqrt{3}} + \frac{1}{\sqrt{3} + \sqrt{4}} + \dots + \frac{1}{\sqrt{8} + \sqrt{9}} = 2$.

14) Simplify: $\frac{\sqrt{6}}{\sqrt{2} + \sqrt{3}} + \frac{3\sqrt{2}}{\sqrt{6} + \sqrt{3}} - \frac{4\sqrt{3}}{\sqrt{6} + \sqrt{2}}$.

15) If $\frac{\sqrt{5} - 1}{\sqrt{5} + 1} + \frac{\sqrt{5} + 1}{\sqrt{5} - 1} = a + b\sqrt{5}$, find a and b .

16) Simplify using the laws of exponents:

(a) Find x so that $7^{2x+1} \div 49 = 7^3$.

(b) $\left[\frac{64}{16} \right]^{-\frac{3}{4}} \times \left\{ \left[\frac{25}{8} \right]^{-\frac{3}{2}} \div \left[\frac{5}{2} \right]^{-3} \right\}$

17) Simplify:

$$\frac{8^{\frac{1}{3}} \times 16^{\frac{1}{3}}}{(32)^{-\frac{1}{3}}}$$

18) Find the value of:

$$\frac{4}{(216)^{\frac{-2}{3}}} - \frac{1}{(256)^{\frac{-3}{4}}}$$

19) Simplify: $\frac{3^{\frac{-6}{7}} \times 4^{\frac{-3}{7}} \times 9^{\frac{3}{7}} \times 2^{\frac{6}{7}}}{2^2 + 2^0 + 2^{-2}}$

20) If $x = \frac{1}{2\sqrt{3}}$ is the zero of the polynomial $p(x) = 2kx^2 - 7x + k$, then find the value

of k .

21) Find the value of ' k ', if $(x - 2)$ is a factor of the polynomial, $2x^3 - 6x^2 + 5x + k$.

22) Check if 3 is a zero of the polynomial $4x^3 + 15x^2 - 63x - 54$.

23) Two polynomials $(ax^3 + 3x^2 - 13)$ and $(2x^3 - 4x + a)$ are divided by $(x - 3)$. If the remainders in each case is the same, find the value of ' a '.

24) If the remainder is same when polynomial $p(x) = x^3 + 8x^2 + 17x + ax$ is divided by $(x + 2)$ and $(x + 1)$, find the value of a .

25) The polynomials $(2x^3 - 5x^2 + x + a)$ and $(ax^3 + 2x^2 - 3)$ when divided by $(x - 2)$ leave the remainders R_1 and R_2 respectively. Find the values of ' a ' if:

(i) $R_1 = R_2$

(ii) $2R_1 + R_2 = 0$

26) Using factor theorem, show that $(2x + 1)$ is a factor of $2x^3 + 3x^2 - 11x - 6$.

27) Find the value of m so that $2x - 1$ be a factor of $8x^4 + 4x^3 - 16x^2 + 10x + m$.

28) If $x - 3$ and $3x - 1$ are factors of $ax^2 + 4x + b$, prove that $a - b = 0$.

29) a) Factorise $4a^2 + 9b^2 + 16c^2 + 12ab - 24bc - 16ca$

b) Factorise $64a^3 + 125b^3$

30) Evaluate using the suitable identities.

(a) $(99)^3$

(b) $(102)^3$

(c) $(998)^3$

31) Factorise:

$$x^3 + 15x^2 + 75x + 125$$

32) Evaluate $48^3 - 30^3 - 18^3$ without actually calculating the cubes.

33) Factorize: $81a^4 - 16b^4$

34) If $x + \frac{1}{x} = 4$, find $x^3 + \frac{1}{x^3}$.

35) If $a + b + c = 5$ and $ab + bc + ca = 10$, then prove that $a^3 + b^3 + c^3 - 3abc = -25$.

36) If $x = \sqrt{2} - 1$, find the value of $x^3 - \frac{1}{x^3}$.

37) If $a + b + c = 56$ and $a^2 + b^2 + c^2 = 20$, find $ab + bc + ca$.

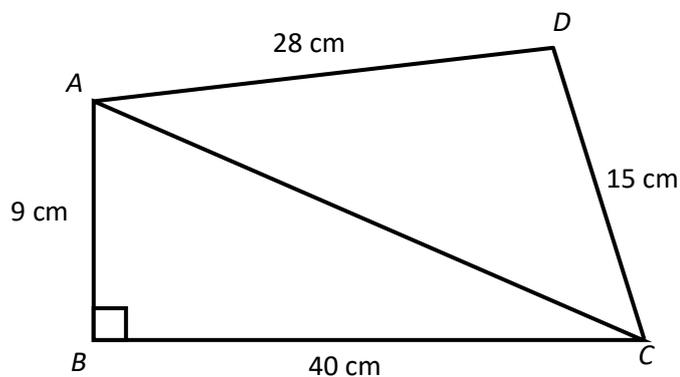
38) Factorize:

a) $x^3 + 2x^2 - x - 2$

b) $x^3 - 3x^2 - 10x + 24$

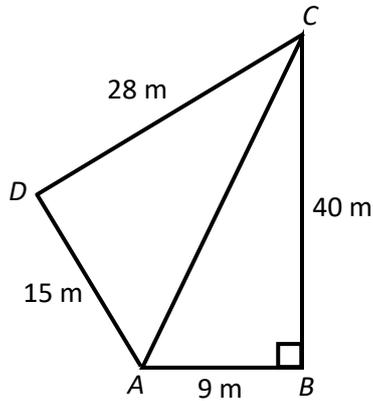
c) $x^3 + 13x^2 + 32x + 20$

39)

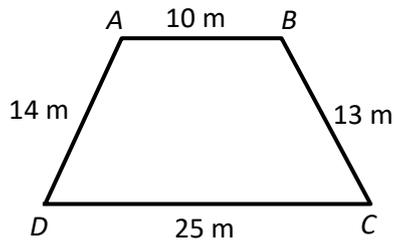


Find the area of a quadrilateral whose sides are 9 cm, 40 cm, 28 cm and 15 cm and the angle between the first two sides is a right angle.

- 40) A group of students were allotted a quadrilateral patch in the school campus to make a garden. They cleared up the patch and decided to grow medicinal plants.
- (i) Find the area of the patch if the dimensions are as given in the figure.
- (ii) What is the value depicted?



- 41) A field is in the shape of a trapezium whose parallel sides are 25 m and 10 m. The non parallel sides are 14 m and 13 m, find the area.



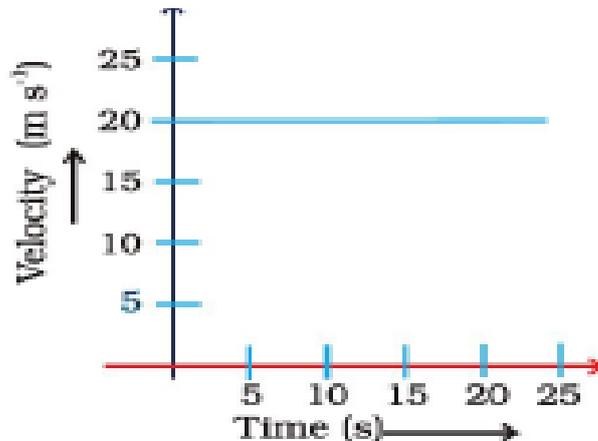
- 42) The lengths of two adjacent sides of a parallelogram are respectively 51 cm and 37 cm. If one of its diagonal is 20 cm then find the area of the parallelogram.
- 43) A square and an equilateral triangle have equal perimeters.
If the diagonal of the square is $12\sqrt{2}$ cm, then find the area of the triangle?
- 44) An umbrella is made by stitching 10 triangular pieces of cloth of two different designs, each pieces measuring 20 cm, 50 cm and 50 cm. How much cloth of each design is required for the umbrella.
- 45) The sides of a triangle are in the ratio 13 : 14 : 15 and its perimeter is 84 cm.
Find its area.

Science

The answers of the following questions are to be written in their respective Science notebooks.

Physics- (Chapter-Motion)

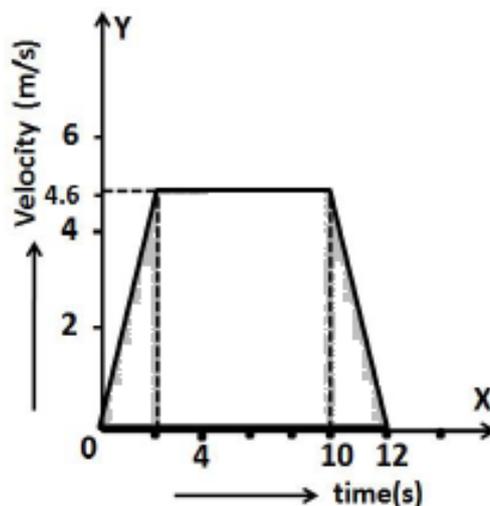
- Q1. A motor cyclist drives from A to B with a uniform speed of 30 km/h and returns back with a speed of 20 Km/h. Find its average speed.
- Q2. Draw a velocity versus time graph of a stone thrown vertically upward and then coming downwards after attaining the maximum height.
- Q3. An electron moving with a velocity of 5×10^4 m/s enters into a uniform electric field and acquires a uniform acceleration of 10^4 m/s² in the direction of its initial motion.
- (i) Calculate the time in which the electron would acquire a velocity double of its initial velocity.
- (ii) How much distance the electron would cover in this time?
- Q4. A particle moving with an initial velocity of 5m/s is subjected to a uniform acceleration of -2.5 m/s². Find the displacement in the next 4s.
- Q5. The velocity time graph shows motion of a cyclist. Find



- (i) its acceleration
- (ii) its velocity
- (iii) distance covered by cyclist in 15 seconds.
- Q6. A body travels a distance of 15m from A to B and then moves a distance of 20m at right angles to AB. Calculate the total distance travelled and the displacement.
- Q7. An object is moving in a circle of radius 'r'. Calculate distance and displacement
- (i) when it completes half the circle
- (ii) when it completes one full circle.

Q8. The velocity time graph of an ascending passenger lift is given below. What is the acceleration of the lift :

- (i) during the first two seconds
- (ii) between 2nd and 10th second
- (iii) during the last two seconds.



Q9. Calculate the speed of the tip of second's hand of a watch of length 1.5cm.

Q10. Prepare a collage on 'Special Theory of Relativity' given by Albert Einstein in the year 1905.

Chemistry

Q1. Convert the following temperatures in Kelvin scale: -

- (a) 37°C
- (b) 100°C

Q2. Why do gases exert pressure?

Q3. Write and explain two factors which will increase rate of evaporation?

Q4. Write the characteristic responsible for :

- (a) Smell of perfume spreads in the room.
- (b) Water takes the shape of the container in which it is kept.

Q5. (a) Why do we wear cotton clothes in summers?

(b) Why do we feel cold, when we keep acetone and ether on our palm?

(c) When solid melts temperature remains constant. Explain.

Q6. (a) Define evaporation.

(b) Draw flow sheet diagram to illustrate inter-conversion of three states of matter?

- Q7. (a) How is high compressibility of gases is useful to us?
(b) Explain with the help of an example, how diffusion of gases in water is essential?
(c) Why does the boiling point of water changes at high altitude as compared to sea water?
- Q8. (a) How will you show the presence of water vapour in air?
(b) What the purpose of determining the melting point of solids?
- Q9. You want to wear your favorite shirt to a party but the problem is that it is still wet after a wash. What steps would you take to dry it faster?
- Q10. (a) The vegetables are cooked better and faster in a pressure cooker. Why it is so?
(b) On suffering from fever, which will lower down your body temperature faster ice or ice cold water?

Biology

Prepare flash cards with name of cell organelles on side of the card and function on the other side.

1. Name the tissue which:
 - i. Allows buoyancy to aquatic plants
 - ii. Provides flexibility to plants
2. What is the function of sieve tube cells and how are they designed to carry out their function?
3. State the difference between the outer layer of the tissue of a branch of a tree and the outer layer of a young tree stem.
4. Differentiate between Chlorenchyma and Aerenchyma.
5. Draw a diagrammatic labelled sketch of stem tip to show the location of meristematic tissue. Mention the function of each meristematic tissue.
6. Give reason for the following:
 - i. The cells of meristematic tissue have dense cytoplasm, thin walls and prominent nuclei.
 - ii. Vacuoles are absent in the cells of this tissue.
7. Identify the type of meristem present in the following:
 - i. At the base of leaves.
 - ii. Girth of stem increase due to this.
 - iii. Increase the length of the stem.
8. Explain how the bark of a tree is formed. How does it act as protective tissue?
9. 'Epithelial tissue is a protective tissue', give three points in favour of this statement. Name the various types of epithelial tissues.

Social Science

Geography (Disaster Management) to be done in Project file

Preparedness and Practical Understanding Skill

Month	May			
Topic	<u>Social Science Disaster Management (As Prescribed by CBSE)</u>			
Content Coverage	<p>Theme-</p> <p>PROJECT 1 :- role of government/non govt. functionaries in your locality on their role in disaster management.</p> <p>PROJECT 2 :- Generating awareness on disaster management.</p> <p>PROJECT 3 :- Preparation of models of disaster resilient structures.</p> <p>PROJECT 4 :- Pocket guide on first aid.</p> <p>PROJECT 5 :- institutional case study on disaster response.</p> <p>PROJECT 6 :- Communication facilities for disaster management.</p> <p>PROJECT 7 :- Preparation of disaster Contingency Plan .</p> <p>Students will choose one Project out of these Teacher will give guidelines about each project to the students .</p>			
Nature of task	Individual Activity			
Learning Objectives	<ul style="list-style-type: none"> • To create awareness among the students about Disaster Management. • To engage in activities which will help minimizing the damage caused by Disaster. • To impart knowledge about Disaster Preparations, relief & recovery 			
Task / Tools / Techniques	Students will prepare a folder			
Execution of task / Procedure	<ol style="list-style-type: none"> 1) The project will be made in a a4 size paper sheet neatly kept in a folder 2) Outer cover of the folder of the project should depict the theme of the project 3) Name of the student , class and section should be written on the right hand side bottom portion of the front page 4) Each page should be serially numbered 5) First page inner side should contain index along with sub topics with serial number of pages 6) Students should mention the acknowledgement of the teachers , parents , neighbours and any professional from whom the help is sought for the project 7) Students must mention the source of information i.e.internet , newspaper, magazine, youtube, books etc. With dates. 			
Criteria / Rubrics for assessment	<p>The students will be assessed on the basis of</p> <p>Content accuracy and originality –(1 Mark), Presentation and creativity-(1 Mark), Process of Project completion-Initiative, Cooperativeness, Participation and punctuality-(1 Mark), Viva or written test for content assimilation-2marks</p>			
	Rubrics	Outstanding	Very Good	Good
	Content accuracy and originality	Purpose of the project is clear. Major points are	Content is mostly complete. All	Little effort given -- just enough to get
				Average
				Not all parts of the project

Computer Application

Project Work for Term-I

This project is for the Term-I. The student is expected to complete up to Assignment-4 in summer vacations.

Activity: Techno Restaurateur

Technology Integration: Business Studies, Language Arts, Math, Visual Arts

Technology Skill: Graphics, Spreadsheet, Word Processing

Version: Google, Open Office, Online (Open Tools)

Program: Spreadsheets, Slides, Drawings, Forms

Assignment 1: Become a Restaurateur

Consider how technology can help launch a restaurant venture.

Assignment 2: Learn Basic Spreadsheet Skills

Explore spreadsheets to understand terminology and acquire basic skills.

Assignment 3: Conduct a Survey of Food Preferences

Investigate cuisine favourites by administering a survey to respondents.

Assignment 4: Record Survey Results in a Spreadsheet

Arrange survey results in a worksheet. Format the data to make it easy to read.

Assignment 5: Graph Survey Results as a Pie Chart

Convert survey results into a pie chart. Customize the legend, labels, and chart style.

Assignment 6: Develop Idea from Survey Results

Interpret the meaning of the survey findings to develop a business concept based on evidence.

Assignment 7: Create a Company Logo

Draw a logo that symbolizes the company. Combine shapes to illustrate an original image.

Assignment 8: Write a Professional Letter

Request seed money for the restaurant. Convince investors that the concept will succeed.

Assignment 9: Draft a Floor Plan

Sketch a floor plan for the restaurant that meets the needs of staff and patrons.

Assignment 10: Calculate Monthly Restaurant Earnings

Total monthly profits. Analyze earnings to devise a business strategy.

Assignment 11: Calculate Quarterly Restaurant Earnings

Measure the financial health of the business. Calculate quarterly and average earnings.

Assignment 12: Graph Quarterly Earnings as a Line Chart

Plot quarterly earnings using a line graph. Predict future profits using a trend line.

Assignment 13: Design a Business Newsletter

Advertise the restaurant as an investment opportunity. Inform entrepreneurs about the benefits.

- Use Functions to Analyze Earnings: Use SUM, AVERAGE, MIN, MAX, and COUNT functions.