

PRABHU DAYAL PUBLIC SCHOOL, SHALIMAR BAGH

HOLIDAY HOMEWORK 2024-25

CLASS-XI

“Success is the sum of small efforts repeated day in and day out.”

Dear Parents,

Summer Vacation is a time for the children to enjoy and relax. These days are precious and valuable and can be made most from if judiciously used. We should always remind ourselves that children will not remember us for the gifts we shower upon them but will always cherish the time we spent with them. It is time to nurture young minds, inculcate moral values and narrate family anecdotes to keep them in touch with their roots.

It's summertime again! The time to strengthen family bond, tying threads of family tree, sharing joys and sorrows and having a good time together.

Here are a few tips to make the vacation a fruitful time for your child:

- Look for interesting books and read as much as you can about the places and people. Take good care of your health and hygiene. Avoid heavy and oily food and increase intake of fresh fruits and water to keep yourself well hydrated and energetic.
- Use Holiday Homework as an opportunity to spend quality time together. The role of the parent is to be a facilitator and guide to steer the child in the right direction.
- Encourage your child to take up yoga or any other form of healthy activity during the vacation.
- Involve children in household chores.
- Enjoy walking with them in parks and appreciate nature.

General instructions:

In order to keep our students well engaged and to revise and be thorough with the portions we have completed so far, we are sending the Summer Holiday Homework. We request parents to encourage the kids to finish their homework during the summer holidays. This will help them to have a revision of all the portions without over burdening them. Original work by the child shall be acknowledged and assessed.

Follow the guidelines given by teachers to complete specific activities.

Happy holidays!

ENGLISH

ALL THE WORK SHOULD BE DONE IN A SEPARATE FOLDER

- 1) Select 2 passages, paste them in the folder and make notes, alongwith summary.
- 2) DRAFT POSTERS ON (any three)
 - the ill effects of binging on junk food.
 - ill-effects of plastics on the environment
 - Blood donation camp
 - Road Safety tips.
 - Save Water
- 3) Paste 4 display advertisements in your folder.

ECONOMICS

***These questions are to be done in the class registers itself.**

CH-4

ORGANISATION OF DATA

Q 1. Convert the following series into a simple frequency distribution:

Mid-value	5	15	25	35	45	55
Frequency	2	8	15	12	7	6

CH-5

TEXTUAL AND TABULAR PRESENTATION

Q 2. There were 160 persons in a trip organized by a school. Out of which 120 were students, 28 were teachers and 12 (all males) were peons. Out of total persons, 32 were females including two lady teachers. Present the above information in a table.

Q 3. In a sample study about coffee habits in two towns, following data were observed:

Town X: 52% persons were males, 25% were coffee drinkers, and 16% were male coffee drinkers.

Town Y: 55% persons were males, 28% were coffee drinkers, and 18% were male coffee drinkers.

Represent the above data in a tabular form.

Q 4. There were 80 persons in a trip organized by a school. Out of which 60 were students, 14 were teachers and 6 (all males) were peons. Out of total persons, 16 were females including one lady teacher. Present the above information in a table.

CH-6

DIAGRAMMATIC PRESENTATION OF DATA

Q 5. Represent the following data by a deviation bar diagram:

Year	2013	2014	2015	2016	2017	2018
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Saving/Deficit (Rs. in'000s)	30	-20	10	15	-25	20
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Q 6. Represent the following data, using a pie diagram:

Brands of Sets	Samsung	LG	Panasonic	Sony	Total
Units sold in Panipat	480	360	240	120	1,200
Units sold in Ambala	600	500	400	300	1,800

Q 7. Represent the following data, using a percentage bar diagram:

Items of Expenditure	Food	Clothing	House Rent	Fuel and Lighting	Total
Family A	480	360	240	120	1,200
Family B	600	500	400	300	1,800

Q 8. Represent the following data by a simple bar diagram:

Year	2014	2015	2016	2017	2018
Strength of the School	500	600	500	700	750

CH-7

FREQUENCY DIAGRAMS

Q 9. Draw the 'less than' and 'more than' ogives on the same graph:

Weekly Wages (Rs.)	0-20	20-40	40-60	60-80	80-100
Number of Workers	10	20	40	20	10

Q 10. Draw the 'less than' and 'more than' ogives on the same graph:

Marks	0-20	20-40	40-60	60-80	80-100
Number of Students	40	51	64	38	7

CH-8

TIME SERIES GRAPHS

Q 11. The table shows the exports and imports of a country in different years:

Years	2011	2012	2013	2014	2015	2016	2017
Exports (in Rs. crores)	300	350	400	380	450	280	250
Imports (in Rs. crores)	420	460	600	480	550	450	400

Represent the data graphically using Arithmetic-Line-Graphs.

Q 12. The table shows the population (in '000s) of men and women in a village in different years:

Year	2012	2013	2014	2015	2016	2017	2018
Number of Men	10	13	15	14	17	18	21
Number of Women	12	18	16	17	20	22	24

Represent the data graphically using Time-Series-Graphs.

MATHS

- Q1. Find the value of $i^2 + i^4 + i^6 + \dots + i^{2n+1}$.
- Q2. Find the value of x so that $\left(\frac{1+i}{1-i}\right)^x$ is real.
- Q3. Find the value of α for which the expression $\frac{1-isin\alpha}{1+2isin\alpha}$ is purely real.
- Q4. Find the value of $a^2 + b^2$ if real value of x that satisfies the equation $\frac{3-4ix}{3+4ix} = a - ib$.
- Q5. Find the $\text{Re}(z)$ and $\text{Im}(z)$ if the complex number z satisfies the equation $\left|\frac{i+z}{i-z}\right| = 1$.
- Q6. If $f(z) = \frac{7-z}{1-z^2}$, where $z = 1 + 2i$, then find modulus of $f(z)$.
- Q7. Three positive numbers form an increasing G.P. If the middle term in this G.P. is doubled, The new numbers are in A.P. Find the common ratio.
- Q8. Consider an infinite geometric series with first term a and common ratio r. If its sum is 4 and the second term is $\frac{3}{4}$, then find a and r.
- Q9. If x, y, z are distinct positive integers, then find the minimum value of $(x+y)(y+z)(z+x)$.
- Q10. If x, $2x + 2$ and $3x + 3$ are in G.P. then find the fourth term.
- Q11. The lengths of three unequal edges of a rectangular solid block are in G.P. The volume of the block is 216 cm^3 and the total surface area is 252 cm^2 . Find the length of the longest edge.
- Q12. One side of equilateral triangle is 28cm. The mid points of its sides are joined to form another triangle whose mid-points, in turn, are joined to form still another triangle. The process is continued indefinitely. Find the sum of all perimeters of all the triangles.
- Q13. Find the value of $9^{1/2} 9^{1/4} 9^{1/8} \dots \infty$.
- Q14. Find the mean deviation of the data 3,10,10,4,7,10,5 from mean.
- Q15. Find the mean deviation of the data 50,69,20,33,53,39,40,65,59 from median.
- Q16. Find the standard deviation of the observations 6,5,9,13,12,8,10.

Q17. Find the variance of first 10 natural numbers.

Q18. The variance of the data 2,4,5,6,8,17 is 23.33. then find the variance of 4,8,10,12,16,34.

Q19. Consider the numbers 1,2,3,4,5,6,7,8,9,10. If 1 is added to each number, then find the standard deviation of the numbers so obtained.

Q20. In an experiment with 15 observations, $\Sigma x^2 = 2830$, $\Sigma x = 170$. One observation '20' was found wrong and was replaced by the correct value 30. Find the corrected variance.

Note : IN ADDITION TO ABOVE PROBLEMS, KINDLY DO THE FOLLOWING:

- (1) Make one power point presentation on any topic from class XI Maths, elaborating its applications and also its link with ART.
(ART INTEGRATED ACTIVITY).

BUSINESS STUDIES

1. What is Sole Proprietorship. Explain its features.
2. Explain the merits and limitations of Sole Proprietorship.
3. Define Partnership. Explain its features.
4. Explain the merits & limitations of partnership.
5. Explain the Types of partners.
6. Explain the Types of partnership.
7. Describe about the registration of Partnership firm.
8. What is a partnership deed? List any six of its contents.
9. Write a note on Minor as a partner.

INFORMATICS PRACTICES

Q. 1 WRITE PYTHON PROGRAMS FOR FOLLOWING:

1. Input name , class and date of birth of a student. Display his name with 'good morning' message and class with 'welcome' message.
2. Write a program in python to accept a character from the user and display whether it is a vowel or consonant.
3. Input principle , rate and time. Display simple interest and final amount.
4. Input two numbers in a and b. find a^b
5. Write a program in python to find the largest among three inputted numbers.
6. WAP using python to input cost and display selling price after increasing 25%
7. WAP using python to input age and display age after 15 years.

PRACTICAL FILE QUESTIONS

1. To input name and print it 10 times with hello message
2. To input weight in kg and print it in grams.
3. To input marks in 3 subjects. Calculate the average and display grades according to the given criteria:

Average	Grade
≥ 90	A+

<90 but >=75 A

<75 but >=50 B

<50 but >=33 D

<33 E

4. To find sale price of an item after inputting cost and profit (%). $SP = CP + CP * \text{profit} / 100$
5. To calculate perimeter and area of a rectangle. Input length and breadth
6. To input two number. Display sum, difference, product, quotient, remainder depending on users choice.
7. To calculate profit-loss for given Cost and Selling Price with appropriate message

Q2. (a) What will be the output produced by the following code fragments-

```
w, x, y, z = 21, 2, 3, 21
print(w/4)
print(w//4)
print(x**y)
print(z%y)
```

(b) Predict the output-

```
x=100
x=x+100
x=x-5
print(x)
x,y=x-5,190
print(x,y)
```

Q3. Solve the following :

- (a) $2 ** 3 ** 2$ (b) $12 \% 3 ** 4 // 5 + 6$
(c) $-7 * 20 + 8 / 16 * 2 + 54$ (d) $7 ** 2 // 9 \% 3$
(e) $(7-4 * 2) * 10 / 5 ** 2 + 15$ (f) $5 \% 10 + 10 - 25 * 8 // 5$

Q4. Will the following expression solve or result in an error. Justify?

'hello' * 2 - 5

Q5. Differentiate between the following.

- (a) = and == (b) / and % (c) / and // (d) * and **

Q6. If the value of b is 7, give the answer of the following expressions:

- (a) $b/6$ (b) $b//6$ (c) $b/4$ (d) $b\%4$ (e) $b\%7$

(f) $b*2$ (g) $b**2$

Q.7 Design a beautiful A4 SIZE POSTER on any of the given topics

- | | |
|---------------------|-----------|
| 1. Python | XI E |
| 2. SQL | XI E |
| 3. Computer Network | XI E |
| 4. Cyber Safety | -----XI C |

REVISE THE SYLLABUS FOR PWT1

***NOTE: Q 1 TO 6 to be done in IP register**

PHYSICAL EDUCATION

Practical 1- Labelled diagram of 400 M Track and Field with computation.

Practical 2- One IOA recognized sports/game of your choice, labelled diagram of field and equipment. Also mention its rules, terminology and skills.

Instructions:

- Do the practical in your practical file.
- All the Diagram should be clear.
- Labelled all the photos related to Terminology and Skills.

ACCOUNTANCY

PART I

WRITTEN WORK

Very short answer questions – 1 mark

1. What do you understand by “Accounting”?
2. What do you mean by Asset and liabilities?
3. Define capital of the company.
4. Define debtors and creditors of the company.
5. Define accounting?

Short Answer Questions – 2 marks

1. What do you mean by accrual basis of accounting?
2. Explain Money Measurement Concept?
3. Define the concept of Dual Aspect.
4. Explain Going Concern Concept.

ACCOUNTING EQUATION

1. Hina is wholesale trader. Record following transactions in Accounting Equation.

i. Commence business with cash Rs. 200,000 and Land Rs. 50,000.

ii. Bought merchandise for cash Rs. 80,000.

iii. Cash sales of worth Rs. 25,000.

iv. Bought goods on credit from Salman of worth Rs. 50,000.

v. Sales on account to Alia Rs. 12,000.

vi. Purchase furniture of the value of Rs. 5,000 by cash.

vii. Received cash form Alia of Rs. 10,000.

viii. Paid wages Rs. 1,000, Rent 2,000.

2. Manav had the following transactions.

Use accounting equation to show their effect on his Assets, Liabilities and Capital?

a) Invested Rs. 15,000 in cash.

b) Purchased securities for cash Rs. 7,500.

- c)** Purchased a home for Rs. 15,000: giving Rs. 5,000 in cash and the balance through loan account.
- d)** Sold securities costing Rs. 1,000 for Rs. 1,500.
- e)** Purchase an old car for Rs. 2,800 cash.
- f)** Received cash as salary Rs. 3,600.
- g)** Paid cash Rs.500 for loan and Rs. 300 for interest.
- h)** Paid cash for expenses Rs. 300.
- i)** Received cash for dividend on securities Rs.200.

Prepare for Periodic Test which will be conducted after holidays.

Syllabus For Periodic Written Test

1. Introduction to Accounting
2. Basic Accounting Terms
3. Accounting Equation
4. Rules of Debit and Credit