

CLASS- XII

ENGLISH HOLIDAY HOMEWORK (2024-25)

WRITING SKILLS

NOTICE-

1.The following is the layout of a notice. Fill in the blanks by choosing the right option from the ones given below:

.....1
.....2
.....3
.....4
.....5
.....6
.....7

Options:

1. (a) Notice (b) Heading (c) Date (d) Name of the organization
2. (a) Date (b) Heading (c) Notice (d) Signature
3. (a) Notice (b) Heading (c) Date (d) Signature
4. (a) Date (b) Heading (c) Content (d) Name of the organization
5. (a) Heading (b) Date (c) Notice (d) Content
6. (a) Name (b) Date (c) Designation (d) Heading
7. (a) Signature (b) Name (c) Date (d) Designation

2. Write a notice for the school notice board inviting contributions for the laborers who have lost their job in the recent natural calamity. Sign yourself as the secretary, Students union, Bal Bharati School, Jabalpur.

3. The Student Council of your school has decided to organize a tour to Goa for the students of classes XI & XII during summer vacation. As the president of the Council, write a notice informing the students about the tour and inviting their names for joining it. Also invent the necessary details.

Job Application

4. Manan/Mita Singh sees the following advertisement in the local newspaper:-

BRIGHT FUTURE COACHING CENTRE
Requires Part -time tutors for all subjects for classes 6-12
The applicant must have an excellent academic record
Must be competent in computers and equipped to take online classes
Good interpersonal skills.
Experience- minimum 2 years.
Apply within 10 days to the Director, Bright Future Coaching Centre,
Meerut

Kavita/Karan decides to apply for the job. Write a letter of application in 120-150 words with detailed bio-data in response to the above advertisement.

5.

SITUATIONS VACANT
Reputed Manufacturing Company needs
Receptionist for its Front Office
Eligibility- Graduate, fluent in both English and Hindi
Good interpersonal skills
Competency in basic computer skills
Minimum 2 years experience
Apply to appletv@gmail.com

Write a letter of application with detailed bio-data in 120-150 words in response to the above advertisement. You are Sanya/ Sanjay

6. Complete the Project work as per the guidelines and instructions given to you.
7. Critically read all the lessons in the text books Vistas and Flamingo.
8. Watch good English movies.
9. Buy a book of Cursive Writing and complete it.
10. Converse in English with siblings and friends.

.....X.....

Roll No. :
Date :

Time -
MM - 76

1. Let R be a relation in the set of natural numbers N defined by $R = \{(a, b) \in N \times N : a < b\}$. Is relation R reflexive? Give a reason. 1
2. Let A be any non-empty set and $P(A)$ be the power set of A . A relation R defined on $P(A)$ by $X R Y \Leftrightarrow X \cap Y = X, X, Y \in P(A)$. Examine whether R is symmetric. 1
3. State the reason for the relation R in the set $\{1, 2, 3\}$ given by $R = \{(1, 2), (2, 1)\}$ not to be transitive. 1
4. Let $A = \{3, 4, 5\}$ and relation R on set A is defined as $R = \{(a, b) \in A \times A : a - b = 10\}$. Is relation an empty relation? 1
5. Given set $A = \{a, b\}$ and relation R on A is defined as $R = \{(a, a), (b, b)\}$. Is relation an identity relation. 1
6. Let set A represents the set of all the girls of a particular class. Relation R on A is defined as $R = \{(a, b) \in A \times A : \text{difference between weights of } a \text{ and } b \text{ is less than } 30 \text{ kg}\}$. Show that relation R is a universal relation. 1
7. Let $A = \{1, 2, 3\}, B = \{4, 5, 6, 7\}$ and let $f = \{(1, 4), (2, 5), (3, 6)\}$ be a function from A to B . State whether f is one-one or not. 1
8. Let $f: R \rightarrow R$ is defined by $f(x) = |x|$. Is function f onto? Give a reason. 1
9. Find the principal value of $\cot^{-1}(-\sqrt{3})$. 1
10. Find the principal value of $\cos^{-1}\left(\frac{1}{2}\right)$. 1
11. Write the principal values of $\sin^{-1}\left(\frac{\sqrt{3}}{2}\right)$. 1
12. Write the principal values of $\sin^{-1}\left(\frac{\sqrt{3}}{2}\right)$. 1
13. Write the principal values of $\sec^{-1}\left(\frac{2}{\sqrt{3}}\right)$. 1
14. Find the principal value of $\operatorname{cosec}^{-1}(2)$. 1
15. Write the principal value of $\tan^{-1}\left(\tan \frac{3\pi}{4}\right)$. 1

16. If $\begin{bmatrix} y+2x & 5 \\ -x & 3 \end{bmatrix} = \begin{bmatrix} 7 & 5 \\ -2 & 3 \end{bmatrix}$, find the value of y . 1

17. Evaluate the following: $[a \ b] \begin{bmatrix} c \\ d \end{bmatrix} + [a \ b \ c \ d] \begin{bmatrix} a \\ b \\ c \\ d \end{bmatrix}$ 1

18. Find X , if $X + \begin{bmatrix} 2 & -1 \\ 3 & -1 \end{bmatrix} = \begin{bmatrix} 2 & 4 \\ 5 & 0 \end{bmatrix}$. 1

19. If $\begin{bmatrix} 9 & -1 & 4 \\ -2 & 1 & 3 \end{bmatrix} = A + \begin{bmatrix} 1 & 2 & -1 \\ 0 & 4 & 9 \end{bmatrix}$, then find the matrix A . 1

20. If $\begin{bmatrix} 2x-1 \\ 5 \end{bmatrix} = \begin{bmatrix} 3 \\ x+y \end{bmatrix}$, find x and y . 1

21. Let N denote the set of all natural numbers and R be the relation on $N \times N$ defined by $(a, b) R (c, d)$ if $ad(b+c) = bc(a+d)$. Show that R is an equivalence relation.

22. Determine whether the relation R defined on the set R of all real numbers as $R = \{(a, b) : a, b \in R \text{ and } a - b + \sqrt{3} \in S\}$, where S is the set of all irrational numbers, is reflexive, symmetric and transitive.

23. If $A = \begin{bmatrix} 4 & 3 \\ 2 & 5 \end{bmatrix}$, find values of x and y such that $A^2 - xA + yI = O$ where I is a 2×2 unit matrix and O is a 2×2 zero matrix. 4

24. Find $3x - 5y$, if $\begin{bmatrix} 2x & 1 & 2y \\ x-y & 0 & 3y \end{bmatrix} = \begin{bmatrix} 12 & 1 & 6-y \\ x-2 & 0 & 6 \end{bmatrix}$ 4

25. Three schools A , B and C want to award their selected students for the values of Honesty, Regularity and Hard work. Each school decided to award a sum of ₹ 2,500, ₹ 3,100, ₹ 5,100 per student for the respective values. The number of students to be awarded by the three schools is given below in the table:

School / Values	A	B	C
Honesty	3	4	6
Regularity	4	5	2
Hard work	6	3	4

Find the total money given in awards by the three schools separately, using matrices.

Apart from the above given values, suggest one more value which should be considered for giving award.

26. There are 2 families A and B . There are 4 men, 6 women and 2 children in family A , and 2 men, 4 women and 4 children in family B . The recommended daily amount of calories is 2400 for men, 1900 for women, 1800 for children and 45 grams of proteins for men, 55 grams for women and 33 grams for children. Represent the above information using matrices. Using matrix multiplication, calculate the total requirement of calories and proteins for each of the 2 families. What awareness can you create among people about the balanced diet from this question.

Let $A = \{a, b\}$. Then number of one-one functions from A to A possible are 1

(a) 2

(b) 4

(c) 1

(d) 3

28. Find the value of $\sin \left[\frac{\pi}{3} - \sin^{-1} \left(-\frac{1}{2} \right) \right]$. 2

29. Find the principal value of $\sin^{-1} \left(-\frac{1}{2} \right) + \cos^{-1} \left(-\frac{1}{2} \right)$. 2

30. If $\sin \left(\sin^{-1} \frac{1}{5} + \cos^{-1} x \right) = 1$, then find the value of x . 2

31. Find the value of the following expression: $\sin^{-1} \left(\sin \frac{2\pi}{3} \right)$. 2

32. Find the value of the following expression: $\cos^{-1} \left(\cos \frac{13\pi}{6} \right)$. 2

33. Find the value of $\sin \left(2 \sin^{-1} \frac{3}{5} \right)$. 2

34. Write the principal value of $\tan^{-1} \left(\tan \frac{3\pi}{4} \right)$. 2

35. Find the principal value of $\tan^{-1} \left(\tan \frac{5\pi}{6} \right)$. 2

36. If $A = \begin{bmatrix} 0 & a \\ 0 & 0 \end{bmatrix}$, find A^{16} . 2

37. Write the value of $x - y + z$ from the following equation: $\begin{bmatrix} x + y + z \\ x + z \\ y + z \end{bmatrix} = \begin{bmatrix} 9 \\ 5 \\ 7 \end{bmatrix}$ 2

38. If $\begin{bmatrix} \cos 3\alpha & \sin 3\beta \\ \sin 3\beta & \cos 3\alpha \end{bmatrix}$ is an identity matrix, find α and β . 3

39. If matrix $A = \begin{bmatrix} 1 & -1 \\ -1 & 1 \end{bmatrix}$ and $A^2 = kA$, then write the value of k . 2

If X and Y are 2×2 matrices, then solve the following matrix equations of X and Y . 6

$$2X + 3Y = \begin{bmatrix} 2 & 3 \\ 4 & 0 \end{bmatrix}, 3X + 2Y = \begin{bmatrix} -2 & 2 \\ 1 & -5 \end{bmatrix}.$$

SUMMER VACATIONS HOME WORK 2024 - 25

PHYSICS - XII

Class XII C AND XII D

PHYSICS

1. Prepare project for board practical as assigned in the class.
2. All the exercise questions of three chapters completed must be completed in physics copy.
3. Class notes must be neatly written in physics copy for evaluation.
4. Write activities neatly with appropriate ray or circuit diagrams in record file from manual.

List of activities are as follows:-

Sec A

1. Assemble the circuit from given collection of items.
2. Uses of multimeter.
3. Correct the wrongly connected circuit.

Sec B

1. LDR
2. Diffraction from razor blades.
3. Identify different electrical component from mixed collection of samples.

All completed work will be evaluated in the first week of July 2024

Biology Holiday Homework

2024-2025

Class 12th

1. Prepare an Investigatory Project to be submitted as a part of the CBSE Board Practical Assessment. The project should be neat, well presented, informative and innovative. It must include the following (in the same sequence):
 - Cover page
 - Certificate
 - Acknowledgement
 - Index
 - Contents
 - Bibliography

❖ The experiment conducted related to your experiment should be carefully recorded with all the readings and proper graphical representation (if required) and relevant pictures (mandatory). The project should be made on A4 size sheets (plain/colored) and contained in a Ringed file. (20-25 pages)
2. Complete Assignments of Chap-1 and Chap-2 (given) below in your Biology Notebook.

ASSIGNMENT-1

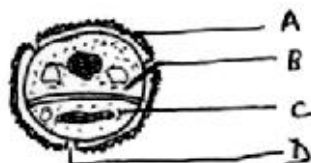
CLASS: XII

SUBJECT: BIOLOGY

SEXUAL REPRODUCTION FLOWERING PLANTS (CHAPTER-1)

M.M. 25

1. List two changes which lead to the differentiation and further development of the floral primordium. 1
2. All of us enjoy the water of tender coconuts. Which tissue does this water represent? What should be the ploidy of cells present in it? 1
3. How are cleistogamous flowers different from chasmogamous flowers? 1
4. Name the innermost wall layer of a typical microsporangium of a flowering plant. Also write its function. 1
5. Give reason as to why geitonogamy is considered similar to autogamy genetically. 1
6. In the given diagram, label A, B, C and D. 2



7. List four devices that are adopted by plants to discourage self-pollination. 2
8. Name and explain the process that results in the formation of a diploid and a triploid cell in angiosperms. 2
9. Draw a V.S. of maize grain, and label: pericarp (b) scutellum (c) coleoptile (d) radicle 2
10. Draw the diagram of a typical anatropous megasporangium of an angiosperm and label any 6 of its parts. 3
11. Give four characteristics of flowers pollinated by insects. Also give any two examples of such plants. 3

ASSIGNMENT II

CLASS: XII

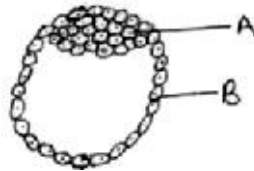
SUBJECT: BIOLOGY

HUMAN REPRODUCTION (CHAPTER-2)

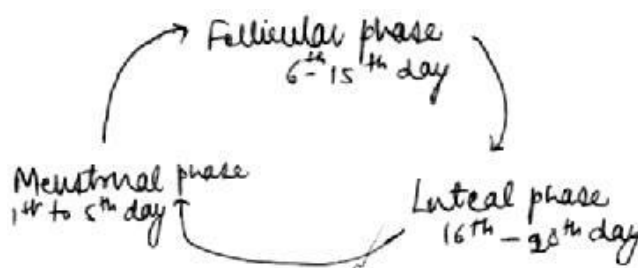
Time : 50 min.

M.M. 25

1. If human spermatogonium has 46 chromosomes, write the number of chromosomes (a) primary spermatocyte (b) spermatid 1
2. Write one function each of these structures of a sperm :
(a) aciosome (b) middle piece 1
3. A zygote undergoes mitoses to form a 8-16 celled embryo. What is this stage known as? What are the individual cells of this stage called? 1
4. Write the function of umbilical cord in humans. 1
5. Fill the boxes „A“ and „B“ with suitable words: 1
Seminiferous tubule → Rete testis → [A] → Epididymis → [B] → Urethra 1
6. Why does each and every coitus not result in fertilization? 1
7. In the figure given below, write the names and one function each of the parts labelled „A“ & „B“



8. Mention the fate of corpus luteum and its effect on the uterus in the absence of fertilization of the ovum in a human female. 2
9. Which hormone is responsible for secretion of milk in human females? What is the significance of colostrums for newborn babies? 2
10. Why is it that fertilization in humans takes place in the fallopian tube and not the uterus, even though implantation has to occur in the later? 2
11. Write the names of any two wall layers of uterus in humans. Write one function of each of these two layers. 2
12. The events of menstrual cycle in humans are represented below. Answer the following questions: 2



- a) During which of the above three phases does the egg travel to fallopian tube from ovary?
- b) Mention whether the levels of FSH and progesterone are low or high
(i) around 13th – 14th day (ii) around 21st and 23rd day of the cycle.
- c) What are the follicular phase and the luteal phase also referred to as? 3
13. List any three functions of placenta. 3
14. Name the pregnancy hormone. Why is it so called? List two sources of this hormone in a pregnant human female. 3

Chemistry Holiday Homework

Class- XII

1. Solve NCERT questions in your chemistry notebook of the following chapters:
 - Haloalkanes and Haloarenes
 - Alcohols, phenols and ethers
 - Solutions
2. Prepare your Chemistry investigatory project

ECONOMICS
Class XII
Holiday Homework (2024-25)

1. Differentiate between Final goods and Intermediate goods.
2. Write the precautions to be taken while calculating national income using Income and Expenditure method.
3. What are capital goods and consumer goods? Discuss the types of consumer goods.
4. Why nominal GDP is not taken as an appropriate index of welfare?
5. Distinguish between depreciation and depreciation reserve fund.
6. Describe the four major sectors in an economy according to the macroeconomic point of view.
7. Give one example of externality which reduces welfare of the people.
8. Define national product and domestic product.
9. If Real GDP is Rs.200 and price index(with base=100) is 110,calculate NOMINAL GDP.
10. If nominal income is Rs.500 and price index is 125,calculate real income.
11. What does GDP Deflator show? How is it estimated?
12. What do you mean by domestic territory of a country and normal residents of a country?
13. What is double counting and how can we avoid it?
14. Calculate sales from following data:

Items	Rs. (In lakhs)
Net value added at factor cost	300
Intermediate consumption	200
Indirect tax	20
Depreciation	30
Change in stocks	(-)50

15. Calculate National income from the following data:

Items	Rs. (in crores)
Private final consumption expenditure	900
Profit	100
Government final consumption expenditure	400
Net indirect taxes	100
Gross domestic capital formation	250
Change in stock	50
Net factor income from abroad	(-)40
Consumption of fixed capital	20
Net imports	30

16. From the following information, calculate Gross National Product at Factor Cost by

- a) Income method
- b) Expenditure method

Items	Rs. (in crores)
Factor income from abroad	10
Compensation of Employees	150
Net domestic capital formation	50
Private final consumption expenditure	220
Factor income to abroad	15
Change in stock	15

Employer's contribution to social security schemes	10
Consumption of fixed capital	15
Interest	40
Exports	20
Imports	25
Indirect taxes	30
Subsidies	10
Rent	40
Government final consumption expenditure	85
Profit	100

17. State three expenditures that are not included while estimating national income by Expenditure method. Why are these not included?
18. Giving reasons, explain how the following are treated in estimating National income:
 - i) Purchase of a truck to carry goods by a production unit.
 - ii) Payment of income tax by a producing unit.
 - iii) Services rendered by family members to each other.
19. Differentiate between Gross investment and Net investment.
20. All machine goods are not capital goods. Justify.

HOLIDAY HOMEWORK
COMPUTER SCIENCE (083)

Class – XII
(2024-25)

Prepare a Power-Point Presentation (PPT) on the given topic.

Roll Number	Topic
1 - 5	Types of networks (PAN, LAN, MAN, WAN)
6 - 10	Network topologies: Bus, Star, Tree (Explanation, layout, advantages and disadvantages)
11 – 15	Network protocol: HTTP, FTP, PPP, SMTP
16 - 20	Wireless media (Radio waves, Micro waves, Infrared waves)
21 – 25	Transmission media: Wired communication media (Twisted pair cable, Co-axial cable, Fiber-optic cable)
26 - 30	Network protocol: TCP/IP, POP3, HTTPS, TELNET, VoIP
31 – 35	Network devices (Modem, Repeater, Hub, Switch, Router, Gateway)
36 - 40	Evolution of networking: introduction to computer networks, evolution of networking (ARPANET, NSFNET, INTERNET)
41 - 45	Types of files (Text file, Binary file, CSV file)

Revise Python concepts done in class 11.

Business studies Holidays Homework

Std 12th

1. Make a Project on Principle of Management or

On Marketing management

Guidelines and sample project given at the end of part 2 book

2. Read the chapter 1,2 thoroughly and write competency-based questions and previous year-based questions from back exercises

ACCOUNTANCY HHW CLASS XII

For 12th class Practical questions of first two chapters

(Fundamentals of partnership and Change in the profit-sharing ratio of Existing partners.)

HOLIDAY HOMEWORK
PHYSICAL EDUCATION CLASS –XII

PROJECT FILE

Select any one game from followings (Student Choice): -

Anyone one IOA recognized Sport/Game of choice.

The Content of the File as follows: -

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