N M PUBLIC SCHOOL

Holiday Homework
Session -2023-24
Class- X

SOCIAL SCIENCE	Make a project file on the following topics according to your roll number. 1. Consumer Awareness (Roll no. 1-13) 2.Social Issues (Roll no. 14 -26) 3.Sustainable Development (Roll no.27 -40)
PHYSICS	Do all previous year questions paper in your note book. Solve all questions of chapter 1st and second in your note book. Learn chapter 10 and prepare a note in own handwriting.
ENGLISH	1 Prepare a project on 'Life History and Achievements of William Shakespeare:. 2 Create your own diary in which you will write daily change which you will bring in yourself. 3 Read English newspaper daily and write five new words with synonyms and antonyms. 4 Learn all written work.
HINDI	प्रश्न 1 रेसिंग साइकिल के लिए लगभग 25 से 50 शब्दों में एक आकर्षक विज्ञापन तैयार कीजिए। अथवा ग्रीनबेरी मोबाइल के लिए लगभग 25 से 50 शब्दों में एक विज्ञापन तैयार कीजिए। प्रश्न 2 पेयजल की समस्या की ओर सरकार का ध्यान दिलाने के लिए किसी समाचार- पत्र के संपादक के नाम पत्र लिखिए। अथवा कुछ समय पूर्व आपने एक टेलीविजन खरीदा है, जो अनेक कारणों से आपके लिए समस्या बना हुआ है ।अपनी समस्या की जानकारी देते हुए विक्रेता के नाम पत्र लिखिए। प्रश्न 3 निम्नलिखित में से किसी एक विषय पर दिए गए संकेत बिंदु के आधार पर लगभग 80 - 100 शब्दों में एक अनुच्छेद लिखिए । शांति किसे प्रिय नहीं है, विज्ञापन और हमारा जीवन ,दया धर्म का मूल है प्रश्न 4 हिंदी दिए गए परियोजना कार्य को फाइल में पूरा कीजिए ।
CHEMISTRY	NOTE- Work should be neat and clean. 1. To prepare an activity a) Prepare a chart to explain types of reaction with suitable example. (roll no. 1-10) b) Daily life applications of rancidity and corrosion with suitable image and reason behind it. Also explain their preventions.(roll no. 11-20) c) Draw a chart of acid , base and salts with suitable images and explain their properties with examples. (Roll no. 21-30) d) Draw a PH value chart and explain their importance in daily life.(roll no.31-40) 2. To prepare a power point presentation on anyone a) Chemical reaction and equations. (Even roll no.) b) Acids , base and salts (odd roll no.) 3. Write and learn thirty element's name with their a) Symbols b) Atomic no. c) Atomic mass d) Valance 4. Write and learn fifty chemical's formulae with their chemical's name. 5. Do complete and revise subject work.
BIOLOGY	1. Do previous year's questions from (2020 to 2023) in a separate assignment copy. 2. Topics for Project are- a. Life Process b. control & coordination c. How do organisms reproduce d. Our Environment
MATHEMATICS	DO THE WORKSHEET ATTACHED

WORKSHEET

1. Show that 12^n cannot end with the digit 0 or 5 for any natural number n.

2. In a morning walk, three persons step off together and their steps measure 40 cm, 42 cm and 45 cm, respectively. What is the minimum distance each should walk so that each can cover the same distance in complete steps?

3. If LCM (480, 672) = 3360, find HCF (480,672).

4. Express 0.69 as a rational number in $\frac{p}{q}$ form.

5. Show that the number of the form 7^n, $n \in N$ cannot have unit digit zero.

6. The numbers 525 and 3000 are both divisible only by 3, 5, 15, 25 and 75. What is HCF (525, 3000)? Justify your answer.

7. Explain why $3 \times 5 \times 7 + 7$ is a composite number.

8. Can two numbers have 18 as their HCF and 380 as their LCM? Give reasons.

9. Without actual division find whether the rational number $\dfrac{1323}{\left(6^3 \times 35^2\right)}$ has a terminating or a non-terminating decimal.

10. Find the least number which when divided by 6, 15 and 18 leave remainder 5 in each case.

11. Find the smallest 4-digit number which is divisible by 18, 24 and 32.

12. Renu purchases two bags of fertiliser of weights 75 kg and 69 kg. Find the maximum value of weight which can measure the weight of the fertiliser exact number of times.

13. In a seminar, the number, the number of participants in Hindi, English and Mathematics are 60, 84 and 108, respectively. Find the minimum number of rooms required if in each room the same number of participants are to be seated and all of them being in the same subject.

14. 144 cartons of Coke cans and 90 cartons of Pepsi cans are to be stacked in a canteen. If each stack is of the same height and is to contain cartons of the same drink, what would be the greatest number of cartons each stack would have?

15. A merchant has 120 litres of oil of one kind, 180 litres of another kind and 240 litres of third kind. He wants to sell the oil by filling the three kinds of oil in tins of equal capacity. What would be the greatest capacity of such a tin?

16. If α and β are the zeroes of the quadratic polynomial $f(x) = 6x^2 + x - 2$, then find the value of

(i) $\alpha - \beta$

(ii) $\alpha^2 + \beta^2$

(iii) $\alpha^4 + \beta^4$

(iv) $\alpha\beta^2 + \alpha^2\beta$

(v) $\dfrac{1}{\alpha} + \dfrac{1}{\beta}$

(vi) $\dfrac{1}{\alpha} + \dfrac{1}{\beta} - \alpha\beta$

(vii) $\dfrac{1}{\alpha} - \dfrac{1}{\beta}$

(viii) $\alpha^3 + \beta^3$

(ix) $\dfrac{\alpha}{\beta} + \dfrac{\beta}{\alpha}$

(x) $\dfrac{\alpha^2}{\beta} + \dfrac{\beta^2}{\alpha}$

(xi) $\dfrac{\alpha}{\beta} + \dfrac{\beta}{\alpha} + 2\left(\dfrac{1}{\alpha} + \dfrac{1}{\beta}\right) + 3\alpha\beta$

(xii) $\alpha^4\beta^3 + \alpha^3\beta^4$

(xiii) $\dfrac{1}{\alpha} + \dfrac{1}{\beta} - 2\alpha\beta$

(xiv) $\dfrac{\alpha^2}{\beta^2} + \dfrac{\beta^2}{\alpha^2}$

17. Verify that 5, –2 and $\dfrac{1}{3}$ are the zeroes of the cubic polynomial $p(x) = 3x^3 - 10x^2 - 27x + 10$ and

18. verify the relation between its zeroes and coefficients.

19. Verify that 3, –2 and 1 are the zeroes of the cubic polynomial $p(x) = x^3 - 2x^2 - 5x + 6$ and verify the relation between its zeroes and coefficients.

20. Verify that the numbers given alongside of the cubic polynomials below are their zeroes. Also verify the relationship between the zeroes and the coefficients in each case:

(i) $2x^3 + x^2 - 5x + 2$; $\dfrac{1}{2}, 1, -2$

(ii) $x^3 - 4x^2 + 5x - 2$; 2, 1, 1