



Delhi Public School Gwalior

(Under the aegis of DPS Society, New Delhi)

Holiday Homework

Session 2020–21

Class-IX

Homework



Dear Children,

It's time for strengthening family bond, cherishing old memories and having a good time together during this Lockdown Period. Keeping this in mind, here is your Holiday Assignment through which you can keep your energies well directed and spend quality time with your Family. Don't forget to take good care of your health and hygiene and bring out a totally new concept of C.O.V.I.D. i.e. Create, Observe, Visualise, Initiate and Dream Big while working enthusiastically.

Here are few things which if you practice along with your Holiday Assignment, will help you stay connected to your roots:

- Listen to the Unspeakable: Start observing things around you meticulously and try to connect and relate them.
- Adopt/grow a plant: You can also plant a few seeds, Water them regularly.
- Try out as many new cuisines as you can: All foodies are going to love this point and be in complete agreement, rather than caring about calories and fats, vacations are a great time to throw caution to the wind and try out as many new cuisines as you like.
- Try out a new fitness regime: Exercise daily and keep yourself fit and healthy.
- Unravel the artist in you: Create anything of your interest. Learn a new song, play a new instrument or enact.
- Good manners is the key: Don't forget to Respect your parents, grandparents and all elders. Reduce the usage of Mobile Phone and TV time and increase the time you spend with your family, spend moments together and create memories.
- Save nature: Contribute to save our previous environment by minimizing the wastage of resources like water, fuel and electricity.

Wishing you an innovative Quarantine!

Class Educator

SUBJECT – ENGLISH

General Instructions:

1. **Kindly submit the holiday homework in a handmade file or folder.**
2. **Assessment Criteria: creativity, neatness, content, grammar, spellings, overall presentation, completion of all the given questions and timely submission.**
3. **The written part should be neatly presented in your own handwriting specifically highlighting the following features**
 - **Cover Page – (Do mention your Full Name, Class and section)**
 - **Acknowledgement**
 - **Note: Share the PowerPoint Presentation on your concerned Subject Educator's mail ID.**
Ms Sonal Rathore (IX- A,B,D,E) Mail ID. - *mssonalrathore@yahoo.com*
Mr Prateek Brijwani (IX –C,F,G,H) Mail ID. - *prateekbrijwani1996@gmail.com*
4. **Remember a well presented 'Holiday Home Work' fetches you marks and appreciation of your teachers and classmates.**
5. **Do all the given homework yourself, it is OK if it looks raw or unfinished, you are not a professional, and you are in process of learning. We your teachers will always appreciate your endeavours!**

- 1) Prepare a PowerPoint presentation (maximum 10 slides) describing the events of the day during the Covid-19 Lockdown.
 - You must include your pictures/videos of doing that work or activity in the presentation.
 - It should be creative and innovative.
 - It should describe your personalised experience
- 2) Create a poem based on any one of the topics - Nature/Friendship/ Your School/ Your Mother/Father or A Memorable Incident. Pen down the synopsis of your poem by describing your idea in 100 -120 words.
- 3) Answer the following questions in about 40-50 words each based on your reading of **Beehive and Moments: (any five)**
 - a) What differences do you find in the present school and the school described in the lesson "The Fun They Had" ?
 - b) When was Evelyn's deafness first noticed? When it was confirmed ?
 - c) How did 'Pungi ' get its new name ? What was it ?
 - d) How do we know that sound of Shennai is considered auspicious ?
 - e) Why was Kezia scared of her father and how did she get over her fear ?
 - f) What do the two roads symbolise in the poem ' The Road Not Taken? ' What is the significance of choosing a road ?
 - g) What plea does the poet make when he addresses the wind ?
 - h) What is the single major memory that comes to the poet? Who are the "darling dreamers" he refer to in the poem 'Rain On The Roof ?'
 - i) Why does the lost child lose interest in the things that he had wanted earlier ?
 - j) Give a brief description of Toto with reference to the lesson 'The Adventures of Toto'.
- 4) Your friend has behaved very selfishly in the canteen today and so you are very upset. Write a diary entry in 150 - 200 words expressing your feelings.

5) **Read the passage given below and answer the questions that follow:**

Health insecurity is at an all time high. In a time when thousands of people lose their health insurance every day, when health care is becoming elusive to even well-to-do Americans, and when any person is just one pink slip away from becoming uninsured, it becomes clear that health care for all is not just important to achieve, but imperative. At its root, the lack of health care for all in America is fundamentally a moral issue. The United States is the only industrialized nation that does not have some form of universal health care (defined as a basic guarantee of health care to all of its citizens).

While other countries have declared health care to be a basic right, the United States treats health care as a privilege, only available to those who can afford it. In this sense, health care in America is treated as an economic good like a TV or VCR, not as social or public good. Although it can be very complex and frustrating at times, it has come a long way from the health care organizations of yesterday. Previously, most health care facilities were a place where the sick were housed and cared for until death. Physicians rarely practised in hospitals and only those who were fortunate, could afford proper care at home or in private clinics. Today, the level of health care has excelled tremendously. Presently the goal of the health care is to have a continuum of care for the patient one which is integrated at all levels. Many hospitals offer a referral service or discharge plan to patients who are being discharged. Plans for the patient are discussed with a discharge planner. The discharge planner is a person who is trained in assessing what the patient's requirements for health care will be after discharge from the hospital.

(A) Answer the following questions:

- (a) Why do Americans feel insecure with regard to health care?
- (b) How is the United States different from other advanced countries in terms of health care as a basic right?
- (c) Why does America consider health care as a privilege ?
- (d) What is today the level of health care in America ?

(B) Choose the correct alternatives :

- (a) What is presently the goal of health care in the USA?
 - (i) available to those who can afford it
 - (ii) to have a continuum of care for the patient.
 - (iii) a place where the sick can be housed and cared
 - (iv) economic good like a TV or VCR
- (b) A person who is trained in assessing what the patient's requirements for health care will be after discharge from the hospital is known as:
 - (i) health care trainee
 - (ii) referral service provider
 - (iii) the discharge planner
 - (iv) none of the above
- (c) A moral issue in America is:
 - (i) health insecurity
 - (ii) health care to be a basic right
 - (iii) health care available to those who can afford it
 - (iv) the lack of health care for all
- (d) The word 'assessing' means ?
 - (i) estimating
 - (ii) discharging
 - (iii) requiring
 - (iv) all of the above

SUBJECT - HINDI

सभी प्रश्नों के उत्तर निर्देशानुसार दीजिए –

निर्देश :

1. प्रश्न 1 से 12 के उत्तर लगभग 30 शब्दों में दीजिए।
2. स्वच्छता व सुलेख पर विशेष ध्यान दीजिए।
3. ग्रीष्मकालीन गृहकार्य एक अलग कॉपी (घर में जो उपलब्ध हो) में करें।
4. गृहकार्य निर्धारित समय पर अपने विषय शिक्षक/शिक्षिका को जमा करवाएं।

प्रश्न 1 सच्चे मित्र की क्या पहचान होती है ?

प्रश्न 2 कांजीहौस किसे कहते हैं ? वहाँ पशुओं के साथ कैसा व्यवहार किया जाता है ?

प्रश्न 3 हीरा-मोती द्वारा साँड को मार गिराना क्या संदेश देता है ?

प्रश्न 4 नम्से कौन थे ? इनके चरित्र की क्या विशेषता थी ?

प्रश्न 5 लेखक ने तिब्बत यात्रा किस वेश में की और क्यों ?

प्रश्न 6 "मैं अब पुस्तकों के भीतर था" लेखक ने ऐसा क्यों कहा है ?

प्रश्न 7 कबीर ने किस सामाजिक बुराई की ओर संकेत किया है और क्यों ?

प्रश्न 8 'खोजी होय' से कबीर का क्या तात्पर्य है ?

प्रश्न 9 किसी व्यक्ति की पहचान उसके कर्मों के आधार पर क्यों करनी चाहिए ?

प्रश्न 10 कवयित्री ललद्यद के अनुसार 'उतराई' देने का क्या आशय है ?

प्रश्न 11 ललद्यद माझी के समक्ष परेशान क्यों है ?

प्रश्न 12 ललद्यद ने 'शिव' किसके लिए प्रयुक्त किया है और वह कहाँ विद्यमान है ?

प्रश्न 13 **औपचारिक एवं अनौपचारिक पत्रों में से कोई 1-1 लिखिए।**

(क) आप बुखार से पीड़ित हैं। चिकित्सक द्वारा आपको आराम करने का परामर्श देने का हवाला देते हुए प्राचार्या जी को एक सप्ताह के अवकाश के लिए प्रार्थना-पत्र लिखिए।

(ख) आपके क्षेत्र में सफाई कर्मचारी के नियमित रूप से न आने के कारण बहुत गंदगी फैल गई है। इसकी शिकायत करते हुए स्वास्थ्य अधिकारी को पत्र लिखिए।

(क) अपने जन्मदिन पर आयोजित कार्यक्रम में किसी संगीतकार को बुलाने का आग्रह करते हुए अपने बड़े भाई को पत्र लिखिए।

(ख) विद्यालय के वार्षिकोत्सव में पुरस्कार प्राप्ति की प्रसन्नता का वर्णन करते हुए अपने पिताजी को एक पत्र लिखिए।

प्रश्न 14 **किन्हीं दो विषयों पर दिए गए संकेत बिंदुओं के आधार पर लगभग 100 शब्दों में अनुच्छेद लिखिए –**

(क) हँसी का महत्त्व

संकेत बिंदु – हँसी और मनुष्य का तनावपूर्ण जीवन, हँसने का महत्त्व, स्वास्थ्य तन और मन के लिए आवश्यक

(ख) स्वावलंबन

संकेत बिंदु – सफलता की कुंजी, गांधी जी का संदेश, प्रगति का मूलमंत्र

(ग) खेल और स्वास्थ्य

संकेत बिंदु – भूमिका, खेलकूद का महत्त्व, उपसंहार

प्रश्न 15 **संवाद लेखन**

एयरपोर्ट जाने के लिए टैक्सी वाले से बातचीत।

SUBJECT – SANSKRIT

सामान्यनिर्देशाः

1. सर्वान् प्रश्नान् उत्तराणि संस्कृतभाषायाम् एव लेखितव्यानि ।
2. संस्कृतस्य कृते पृथक् फाइल भविष्यति ।
3. गृहकार्यम् निर्धारितसमये प्रदेयम् ।
4. लेखनकार्यं स्पष्टं स्वच्छं सुन्दरं भवेत् ।

1. निम्नलिखित सर्वनाम-शब्दरूपाणि अपनी उत्तरपुस्तिका में स्पष्ट तथा सुन्दर हस्तलेखन में लिखें –
तत् (तीनों लिंगों में), एतत् (तीनों लिंगों में), इदम् (तीनों लिंगों में) ।
अस्मद् तथा युष्मद् ।

2. धातुरूपाणि-(परस्मैपदी) : पठ्, गम्-गच्छ्, वद्, भू-भव्, क्रीड्, नी, दृश्, अस्, कृ, पा-पिब् धातुओं को –
लट्लकार, लृट्लकार, लोट्लकार, लंगलकार तथा विधिलिङलकार में लिखिए ।
(आत्मनेपदी) : लभ् तथा सेव् धातुओं को लट् तथा लृट्लकार में लिखिए ।

(कंठस्थ/याद कर के संस्कृत की उत्तरपुस्तिका में सुंदर ढंग से लिखिए ।)

3. पठ्, गम्-गच्छ्, वद्, भू-भव्, क्रीड्, नी, दृश्, अस्, कृ, पा-पिब् धातुओं को क्त्वा, तुमुन् तथा ल्यप् इन तीनों प्रत्ययों में लिखिए । जैसे- पठ् + क्त्वा = पठित्वा ।
4. एक से सौ तक की संख्याओं को संस्कृत में लिखें तथा याद भी करें ।
5. आ, वि, प्रति, उप, अनु, निर, प्र, अधि, अप, नि, अव – इन उपसर्गों से युक्त दो-दो शब्द लिखें और याद करें ।

SUBJECT - MATHEMATICS

General Instructions:

- 1) Solve the sums in a separate notebook or any diary. (Available at home)
- 2) Use the stuff which is available at home.
- 3) Do the questions in sequence.
- 4) Work should be neat.
- 5) Do the questions systematically.

SECTION - A

Choose the correct answer

- Q.1 Between two rational numbers
(a) there is no rational number
(b) there is exactly one rational number
(c) there are infinitely many rational numbers
(d) there are only rational numbers and no irrational numbers
- Q.2 Decimal representation of a rational number cannot be
(a) terminating (b) non-terminating
(c) non-terminating repeating (d) non-terminating non-repeating

- Q.3 Which of the following is irrational?
 (a) $\sqrt{\frac{4}{9}}$ (b) $\frac{\sqrt{12}}{\sqrt{3}}$ (c) $\sqrt{7}$ (d) $\sqrt{81}$
- Q.4 A rational number between $\sqrt{2}$ and $\sqrt{3}$ is
 (a) $\frac{\sqrt{2} + \sqrt{3}}{2}$ (b) $\frac{\sqrt{2} - \sqrt{3}}{2}$ (c) 1.5 (d) 1.8
- Q.5 $\frac{1}{\sqrt{9} - \sqrt{8}}$ is equal to
 (a) $\frac{1}{2}(3 - 2\sqrt{2})$ (b) $\frac{1}{3 + 2\sqrt{2}}$ (c) $3 - 2\sqrt{2}$ (d) $3 + 2\sqrt{2}$
- Q.6 $\sqrt[4]{\sqrt[3]{2^2}}$ equal to
 (a) $2^{-1/6}$ (b) 2^{-6} (c) $2^{1/6}$ (d) 2^6
- Q.7 The value of $\sqrt[4]{(81)^{-2}}$ is
 (a) $\frac{1}{9}$ (b) $\frac{1}{3}$ (c) 9 (d) $\frac{1}{81}$
- Q.8 $0.3\bar{2}$ when expressed in the form of p/q is
 (a) $\frac{8}{25}$ (b) $\frac{29}{90}$ (c) $\frac{32}{99}$ (d) $\frac{32}{199}$
- Q.9 The value of $x - y^{x-y}$ when $x = 2$ and $y = -2$ is
 (a) 18 (b) -18 (c) 14 (d) -14
- Q.10 If $p(x) = x + 3$, then $p(x) + p(-x)$ is equal to
 (a) 3 (b) $2x$ (c) 0 (d) 6
- Q.11 If $x^{51} + 51$ is divided by $x + 1$, the remainder is
 (a) 0 (b) 1 (c) 49 (d) 50
- Q.12 $\sqrt{2}$ is polynomial of degree
 (a) 2 (b) 0 (c) 1 (d) $\frac{1}{2}$
- Q.13 Degree of polynomial $4x^3 + 0x^2 + 0x^4 + 5x$ is
 (a) 1 (b) 2 (c) 3 (d) 4
- Q.14 If $p(x) = x^2 - 2\sqrt{2}x$, then $p(2\sqrt{2})$ is equal to
 (a) 0 (b) 1 (c) $4\sqrt{2}$ (d) $8\sqrt{2} + 1$
- Q.15 The value of the polynomial $5x - 4x^2 + 3$, when $x = -1$ is
 (a) -6 (b) 6 (c) 2 (d) -2

- Q.16 The coefficient of x in the expansion of $(x+3)^3$ is
 (a) 1 (b) 9 (c) 18 (d) 27
- Q.17 Point $(-3, 5)$ lies in the
 (a) first quadrant (b) second quadrant (c) third quadrant (d) fourth quadrant
- Q.18 Abscissa of all points on the x -axis is
 (a) 0 (b) 1 (c) 2 (d) any number
- Q.19 The point at which the two co-ordinate axes meet is
 (a) abscissa (b) ordinate (c) origin (d) quadrant
- Q.20 If $9^{x+2} = 240 + 9^x$, then $x =$
 (a) 0.5 (b) 0.2 (c) 0.4 (d) 0.1

Fill ups

- Q.21 The product of any two irrational numbers is _____.
- Q.22 The value of $2\sqrt{3} + \sqrt{3}$ is _____.
- Q.23 The value of $0.\overline{23} + 0.\overline{22}$ is _____.
- Q.24 The rationalisation factor of $2 + \sqrt{3}$ is _____.
- Q.25 If $x+a$ is a factor of $x^4 - a^2 x^2 + 3x - 6a$, then the value of a is _____.
- Q.26 If $x^3 + 6x^2 + 4x + k$ is exactly divisible by $x+2$, then the value of k is _____.
- Q.27 Zero of the polynomial $3x + 1$ is _____.
- Q.28 The measure of the angle between the co-ordinate axes is _____.
- Q.29 The distance of the point $P(3, 2)$ from the origin is _____.
- Q.30 Every rational number is a _____.

True / False

- Q.31 $\sqrt[5]{6} \times \sqrt[5]{6}$ is equal to $\sqrt[5]{6}$.
- Q.32 When simplified $(x^{-1} + y^{-1})^{-1}$ is equal to $\frac{xy}{x+y}$.
- Q.33 Every point on a number line represents a unique real number.
- Q.34 Sum of two irrational numbers can never be irrational.
- Q.35 Irrational numbers can be terminating or non-terminating.

Q.36 Expression $x^2 + \frac{3x^{\frac{3}{2}}}{\sqrt{x}}$ is not a polynomial.

Q.37 $\sqrt{5}$ is a constant polynomial.

Q.38 If $x+1$ is a factor of the polynomial $2x^2 + kx$, then the value of k is -2.

Q.39 Point (0, -7) lies in third quadrant.

Q.40 The perpendicular distance of the point P (5,2) from x -axis is 2.

Match the following

- | | |
|--|------------------------|
| Q.41 Rational number | (a) $5\sqrt{6}$ |
| Q.42 $(64)^{1/3}$ | (b) $\sqrt[5]{x}$ |
| Q.43 $\sqrt{2}$ | (c) 1 |
| Q.44 \sqrt{xy} | (d) 4 |
| Q.45 $\sqrt{10} \times \sqrt{15}$ | (e) Origin |
| Q.46 $\sqrt[3]{x} \div \sqrt[8]{x}$ | (f) $\sqrt{225}$ |
| Q.47 Coefficient of x^2 in $\sqrt{3}x - 7$ | (g) $\sqrt{x}\sqrt{y}$ |
| Q.48 Degree of polynomial $5y - \sqrt{2}$ is | (h) Second quadrant |
| Q.49 Intersection point of axes | (i) 1.4142 |
| Q.50 Coordinate (-3, 2) lies in | (j) 0 |

SECTION - B

Solve the following

Q51. Express each of the following decimals in the form $\frac{p}{q}$:

- (i) $0.\bar{4}$ (ii) $0.\bar{37}$ (iii) $0.\bar{621}$ (iv) $4.\bar{7}$ (v) $0.4\bar{7}$

Q52. Represent $\sqrt{6}$, $\sqrt{7}$, $\sqrt{8}$ on the number line.

Q53. Represent $\sqrt{3.5}$ on the number line.

Q54. Visualize 2.665 on the number line, using successive magnification.

Q55. Assuming that x, y, z are positive real numbers, simplify : $\sqrt[5]{243x^{10}y^5z^{10}}$.

Q56. Simplify : $\sqrt[3]{(343)^{-2}}$.

Q57. Prove that : $9^{3/2} - 3 \times 5^0 - \left(\frac{1}{81}\right)^{-1/2} = 15$.

Q58. If $2^{5x} \div 2^x = \sqrt[5]{2^{20}}$, Find the values of x .

Q59. Simplify : $\frac{\sqrt[4]{1250}}{\sqrt[4]{2}}$.

Q60. Rationalize the denominator of : $\frac{\sqrt{2} + \sqrt{5}}{\sqrt{3}}$.

Q61. Express each one of the following with rational denominator :

(i) $\frac{1}{3 + \sqrt{2}}$ (ii) $\frac{16}{\sqrt{41} - 5}$

Q62. Rationalize the denominator and simplify :

(i) $\frac{\sqrt{3} - \sqrt{2}}{\sqrt{3} + \sqrt{2}}$ (ii) $\frac{2\sqrt{6} - \sqrt{5}}{3\sqrt{5} - 2\sqrt{6}}$ (iii) $\frac{4\sqrt{3} + 5\sqrt{2}}{\sqrt{48} + \sqrt{18}}$

Q63. In each of the following determine rational numbers a and b :

(i) $\frac{5 + 3\sqrt{3}}{7 + 4\sqrt{3}} = a + b\sqrt{3}$ (ii) $\frac{\sqrt{11} - \sqrt{7}}{\sqrt{11} + \sqrt{7}} = a - b\sqrt{77}$

Q64. If $f(x) = 2x^3 - 13x^2 + 17x + 12$, find (i) $f(2)$ (ii) $f(-3)$ (iii) $f(0)$

Q65. Verify whether the indicated numbers are zeros of the polynomial corresponding to them in the following cases :

(i) $p(x) = x^3 - 6x^2 + 11x - 6$, $x = 1, 2, 3$ (ii) $f(x) = 5x - \pi$, $x = \frac{4}{5}$

Q66. If $x = -\frac{1}{2}$ is a zero of the polynomial $p(x) = 8x^3 - ax^2 - x + 2$, find the value of a .

Q67. Using the remainder theorem, find the remainder when $f(x)$ is divided by $g(x)$ and verify the result by actual division :

$f(x) = x^3 + 4x^2 - 3x + 10$, $g(x) = x + 4$.

Q68. If the polynomials $2x^3 + ax^2 + 3x - 5$ and $x^3 + x^2 - 4x + a$ leave the same remainder when divided by $x - 2$, find the value of a .

Q69. For what value of a is $(x - 5)$ a factor of $x^3 - 3x^2 + ax - 10$?

Q70. What must be added to $3x^3 + x^2 - 22x + 9$ so that the result is exactly divisible by $3x^2 + 7x - 6$?

Q71. What must be subtracted from $x^3 - 6x^2 - 15x + 80$ so that the result is exactly divisible by $x^2 + x - 12$?

Q72. factorize: $x^3 + 6x^2 + 11x + 6$.

Q73. Factorize : $xy^9 - yx^9$.

Q74. Factorize : $64a^3 + 125b^3 + 240a^2b + 300ab^2$.

Q75. Evaluate $\left(2x - \frac{1}{x}\right)^2$.

Q76. Write $(2a + 3b - c)^2$ in the expanded form.

Q77. If $x + \frac{1}{x} = 11$, find the value of $x^2 + \frac{1}{x^2}$.

Q78. In which quadrant or on which axis do each of the points $(4, -2)$, $(-3, -4)$, $(2, 5)$, $(-2, 4)$, $(0, -3)$ and $(-5, 0)$ lie?

Q79. Plot the following points on the graph paper:

(i) $(2, 5)$ (ii) $(4, -3)$ (iii) $(-5, -2)$ (iv) $(5, -4)$ (v) $(-3, 2)$ (vi) $(-4, 0)$ (vii) $(0, 5)$

Q80. Plot the following points on the Cartesian plane. Identify the figure obtained by joining these points:

A $(-5, -2)$, B $(4, -2)$, C $(6, 4)$ and D $(-3, 4)$.

SUBJECT - SCIENCE



NOTE -

1. Project should be presented in good handwriting.
2. It is mandatory to submit the project within given time limit.
3. Mention your name, class and section on the cover page.

Prepare a project report on any one topic using available ruled sheets / A4 size paper/ drawing sheet.

1. Collect information about any five types of motion and types of forces and present the information in a folder with illustration, pictures and photographs / diagrams.
2. Prepare a project report on methods to purify water such as boiling, filtration, distillation, chlorination, multi stage RO filtration or any other method with illustration, pictures and diagrams.
3. Collect information about any four communicable disease and present the information in a folder with illustration, pictures and diagrams including causative organism, mode of transmission, symptoms, cure and preventive measures of each disease.

SUBJECT - SOCIAL SCIENCE

Instructions -

1. **The project should be submitted in a handmade file or folder.**
2. **It should be prepared/ made from eco-friendly products without incurring too much expenditure.**
3. **The project report should be handwritten by the students themselves.**
4. **Refer CBSE website (syllabus- Social Science) for the layout of the project report.**
5. **For details please refer disaster management supplement book.**

TOPIC – COVID - 19 **OR BHOPAL GAS TRAGEDY (Any – one)**

GUIDELINES FOR SUBMITTING THE PROJECT

Follow the sequence of the project as given below.

- a. Acknowledgement
- b. Index
- c. Define disaster and its types.
- d. Causes
- e. Extent of damage
- f. Who is responsible?
- g. Steps taken by the government to combat.
- h. Precautions to be taken.
- i. Organisations working to help.
- j. Dos and don'ts

Note : Kindly submit all subjects' holiday homework (within 15 days) of the reopening of school.

