

ARMY PUBLIC SCHOOL FATEHGARH
SUMMER VACATION HOLIDAY HOME WORK 2020-21
Class X

HINDI

1. स्पर्श गद्य पाठ 1,2,3 के प्रश्नोत्तर कॉपी में पूरा करें तथा याद करें।
2. स्पर्श पद्य पाठ 1, 2,3,4 के प्रश्नोत्तर कॉपी में पूरा करें तथा याद करें।
- 3- 25 मुहावरे तथा उनका अर्थ कॉपी में लिखो तथा याद करो।
- 4-निम्नलिखित वाक्यों को निर्देशानुसार परिवर्तित करो-
क-रोहन खाना खाकर सो गया। संयुक्त वाक्य में बदलो
ख-दूसरों की सहायता करने वालो की आज भी कमी नहीं है। मिश्र वाक्य
ग-जो कक्षा में प्रथम आया ,कल उसे पुरस्कार मिलेगा। सरल वाक्य
घ-घायल होने के कारण वह मैदान से चला गया। संयुक्त वाक्य
च,-रात के दस बजते ही मैंने पढ़ना बंद कर दिया। मिश्र वाक्य
- 5-बचाव ही सुरक्षा है- कोरोना महामारी के सन्दर्भ में अपने विचार 100 शब्दों में लिखिये।
- 6-आपकी कालोनी में सोशल डिस्टेंसिंग का पालन न किये जाने की जानकारी देते हुए जिलाधिकारी को पत्र लिखिये।
- 7-विद्यार्थियों को बोर्ड परीक्षा की जानकारी देने हेतु प्रधानाचार्या की ओर से 20- 25 शब्दों में सूचना लिखिये।
- 8-सुपर कॉम्प्यूटर शॉप के लिये 25-30 शब्दों में एक आकर्षक विज्ञापन तैयार कीजिये।

ENGLISH

1. You are Raman/ Shreesh, living at 1, MG Road, Bengaluru. You are very much concerned about the bad state of roads in the city. Write a letter to the editor of a newspaper expressing your concern over the problem faced by the commuters and giving suitable suggestions to solve the problem.
2. As Mr. R. Singh, HOD Chemistry, Cambridge High School, Pune, you had placed an order with Messrs. Scientific Equipments, Dadar, Mumbai for test tubes and jars for

the lab. When the parcel was received you observed that markings on the test tubes were not clear and some of the jars were damaged. Write a letter of complaint seeking immediate replacement.

3. A survey was conducted on why teens under-perform at school. Using the information given below and your own ideas, write an article in about 100-120 words for the school magazine on why students do not perform to their full potential and how it can lead to low self esteem and depression. Also make suggestions that can help such children. You are Animesh/ Anamika.
 - Lack of motivation
 - Poor work habits study skills
 - Problem at home or with peers
 - Emotional and behavior problem
 - Lack of discipline and persistence
 - Medical problems
4. Watch 2 English movies and write their stories in 150- 200 words. These stories will be asked in speaking activity.
5. Learn unit-1,2 and 3 [First Flight]. Chapter – 1,2 and 3 [Footprints without Feet]. Revise Modals and tenses in grammar.
6. Watch English news for 15 minutes daily. Note down 5 new words daily and write them in your holiday homework notebook.

MATHS

Following work has to be done in ACTIVITY FILE. Work should be presentable colour full.

(1)—Draw the graph of the pair of linear equations $2x+y=4$ and $2x-y=4$. Write the vertices of the triangle formed by these lines and the Y-axis. Find the area of this triangle.

(2)—Do the plotting of (a) Parallel lines & (b) coincident lines by taking any two suitable equations.

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Following questions has to be done in a separate thin copy

(3)-- Find the degree of the polynomial $(x+1)(x^2-x+x^4+1)$.

(4)—If one of the zeroes of the polynomial $f(x) = 4x^2 - 8kx - 9$ is equal in magnitude but opposite in sign of the other, then find the value of the k.

(5)—Write the quadratic polynomial whose zeroes are -3 & 4.

(6)—Find the zeroes of the Q.P. $7y^2 - 11y/3 - 2/3$ and verify the relationship between the zeroes and their coefficients.

- (7)—What must be subtracted from $f(x) = 4x^4 + 2x^3 - 2x^2 + x - 1$, so that the resulting polynomial is divisible by $g(x) = x^2 + 2x - 3$?
- (8)—If α and β are the zeroes of $ax^2 + bx + c$, then find the other polynomial whose zeroes are α^2/β and β^2/α .
- (9)—If α, β are the zeroes of a Q.P. $3x^2 - 6x + 4$, find the value of $(\alpha/\beta + \beta/\alpha) + 2(1/\alpha + 1/\beta) + 3\alpha\beta$.
- (10)—Write the nature of the graph of the equation $6x - 2y + 9 = 0$ and $3x - y + 12 = 0$.
- (11)—If lines $x + 2y + 7 = 0$ and $2x + ky + 18 = 0$ intersect at a point then find the value of k .
- (12)—If $47x + 31y = 18$ and $31x + 47y = 60$ then find the value of $x + y$.
- (13)—Find the values of α & β for which the following system of equations has infinite no. of solutions. $2x + 3y = 7$ and $2\alpha x + (\alpha + \beta)y = 28$.
- (14)—Solve the following system of equations for x & y by using elimination method, $0.4x + 0.3y = 1.7$ and $0.7x - 0.2y = 0.8$.
- (15)—Solve the following equations by using cross-multiplication method:-
 $2x + 5y - 1 = 0$ & $2x + 3y - 3 = 0$
- (16)—Solve the following system of equations:- $8v - 3u = 5uv$; $6v - 5u = -2uv$
- (17)—If two cubes of edge 7cm, each are joined end-to-end, then find the surface area of the resulting cuboid.
- (18)—The cylinder of radius 12cm have filled 20cm with water. One piece of iron drop in the stands of water goes up 6.75cm. Find the radius of sphere piece.
- (19)—A semi-circular sheet of metal of diameter 28cm is bent into an open conical cup. Find the depth & capacity of the cup.
- (20)—A metallic cylinder has radius 3cm and height 5cm. It is made of metal A. To reduce its weight, a conical hole is drilled in the cylinder on the top and it is filled with lighter metal B. The conical hole has a radius of $3/2$ cm and its depth is $8/9$ cm. Calculate the ratio of the volume of the metal A to the volume of the metal B in the solid.
- (21)—A fraction clutch is in the form of a frustum of a cone, the diameter of the ends being 32cm and 20cm and length 8cm. Find its bearing surface and volume.

SCIENCE

1. Explain the following reactions with examples—
 - (a) combination reaction
 - (b) Decomposition reaction
 - (c) Displacement reaction.
 - (d) Double displacement reaction
 - (e) Redox reaction
 2. Write all the chemical reactions of acids and bases which are mentioned in NCERT.
 3. Write the preparation and utilization of any two salts.
 4. Explain the human respiratory system and human digestive system with diagram.
 5. Solve all the numericals of NCERT of the chapter which have been taught to you in physics.
 6. solve any 15 numericals of physics which have been asked in the previous year board exams.
- Complete all the work in a separate copy.

SOCIAL SCIENCE

Map points. (In fair note book)

HISTORY - Identify the features on the outline political map of India, with the help of the following information .

1. The place where the Indian National Congress Session was held in December 1920 - Nagpur (Maharashtra)
2. The place where the Indian National Congress Session was held in September 1920 - Calcutta (West Bengal)
3. The place where the Indian National Congress Session was held in 1927 - Madras (Now known as Chennai in the state of Tamil Nadu)
4. The place where the Indian National Congress Session was held in 1929 - Lahore (Pakistan)
5. The place where Gandhiji organised 'Satyagraha' in favour of cotton mill workers - Ahmedabad (Gujarat)
6. The place associated with peasants' Satyagraha - Kheda (Gujarat)

7. Name the State where the Indigo planters organised Satyagraha - Champaran in Bihar
8. The City associated with Jallianwala Bagh incident - Amritsar (Punjab)
9. The place where Gandhiji violated the salt law - Dandi (Gujarat)
10. The place where the Civil Disobedience Movement was started - Sabarmati Ashram (Gujarat)
11. The place where Non- Cooperation Movement ended abruptly due to violence - Chauri-Chaura (Uttar Pradesh)

GEOGRAPHY - Iron and Steel Plant

- Bhadrawati Iron and Steel Plant - Karnataka
- Vijayanagar Iron and Steel Industry - Karnataka
- Durgapur Iron and Steel Plant - West Bengal
- Bokaro Iron and Steel Plant - Jharkhand
- Jamshedpur Iron and Steel Plant - Jharkhand
- Raurkela Iron and Steel Plant - Odisha
- Bhilai Iron and Steel Plant - Chhattisgarh

Cotton Textile Industry

- Kanpur Cotton Textile Industry - Uttar Pradesh
- Madurai Cotton Textile Industry - Tamil Nadu
- Mumbai Cotton Textile Industry - Maharashtra
- Indore Cotton Textile Industry - Madhya Pradesh
- Ahmedabad Cotton Textile Industry - Gujarat
- Surat Cotton Textile Industry - Gujarat
- Coimbatore Cotton Textile Industry - Tamil Nadu
- Kolkata Software Technology Park - West Bengal

Software Technology Parks

- Gandhinagar Software Technology Park - Gujarat
- Noida Software Technology Park - Uttar Pradesh
- Indore Software Technology Park - Madhya Pradesh
- Jaipur Software Technology Park - Rajasthan

Nuclear Power Plant

- Naraura Nuclear Power Plant - Uttar Pradesh
- Rawat Bhata Nuclear Power Plant - Rajasthan
- Tarapur Nuclear Power Plant - Maharashtra
- Namrup Thermal Power Plant - Assam

Airports:

Raja Sansi - Amritsar

Indira Gandhi International - Delhi

Chhatrapati Shivaji - Mumbai

Meenam Bakkam - Chennai

Netaji Subhash Chandra Bose - Kolkata

Rajiv Gandhi - Hyderabad

Major Sea Ports

Tuticorin Major Sea Port - Tamil Nadu

Kochi Major seaport - Kerala

Kandla Major seaport - Kutch, Gujarat

2. Learn And write all the NCRT and last year asked questions in board exam of covered syllabus.

IT(402)

Q1. Who has developed (Individual/Company name)?

- a. Facebook
- b. WhatsApp
- c. Blogs
- d. Youtube
- e. Aarogya Setu App
- f. Zoom App
- g. Linux OS
- h. Windows OS
- i. Android OS
- j. Portable Document Format (PDF)

Q2. Write down the steps to create a Skype Id?

Q3. What are the different disabilities that affect computer usage?

Q4. What is the purpose of using HTTPS in the URL address?

Q5. In which Situation we prefer Star topology over Ring topology?

DRAWING

1. Make a still life composition and shade it by using pencils-

2B, 4B, n 6B

Object- Home Utensils

2. Make a Landscape drawing including the following -

Mountain, Tree, River, House. (Pencil shading /Pencil Colours).