MT. COLUMBUS SCHOOL
Dakshinpuri, New Delhi – 62

HOLIDAY HOMEWORK (WINTER VACATION)
SESSION: 2018-19
Class- X
Activity

- **Prepare a Research Project on any <u>one</u> of the following topics for about 15 pages on A4 size sheets-**
  1. Yoga
  2. Running/Jogging
  3. Trekking/Hiking/Biking/Cycling
  4. Camping
  5. Military Training

ENGLISH

I. **Choose the best word from the options given in bracket to complete the following passages:**

1. Most UFO sightings occur **(a)**……………. (at, in, on, during) the night, either late in the evening or in the early hours of the morning, **(b)**……………….. (As, While, When, Often) they take place on a dark moonless night when the person **(c)**…………….. (are, is, were, was) alone on a country road. This eerie atmosphere is perfect **(d)** ………………………… (of, for, off, on) playing tricks on a person's imagination. Police and newspaper officers are often swamped **(e)**………………… (in, for, with, among) calls when something strange is seen in the skies, **(f)**………………….. (How, Then, Once, Before) an explanation is given, most people are happy to accept it.

2. Climate change **(a)**……………… (is, was, will, has) one **(b)**………………… (at, on, with, of) the most **(c)**……………….. (hot, hoted, hotly, hoting) contested environmental debates of our time. **(d)**……………………… (Will, Can, Have, Has) the West Antarctic ice sheet melt entirely? Will the Gulf Stream ocean current **(e)**…………………. (was, be, is , are) disrupted? May be. May be not. **(f)**………………….. (Neither, Either, Or, As) way, Antarctica is a crucial element in this debate.

3. Sadao had taken this **(a)**………………. (in, into, at, of) his mind as he did **(b)**……………………….. (nothing, everything, all, everywhere) his father said, his father who **(c)**………………. (always, seldom, never, ever) joked **(d)**………………… (and, or, else, nor) played **(e)**………………………… (with, of, at, in) him but **(f)**…………………. (whose, whom, who, what) spent infinite pains upon him who was his only son.

4. So **(a)**…………………. (a, an, the, one) wizard said, "Oh, very well. **(b)**………………(Go, went, gone, going) to the end of the lane and turn **(c)**………………….. (on, in, around, from) three times and look down the magic well and there you will **(d)**……………. (found, finding, find) three pennies. Hurry **(e)**……………………… (up, at, on, of)." So Roger Skunk went to the end of the lane and **(f)**…………………. (turn, turned, turning, has turned) around three times and there in the magic well were three pennies!

5. Human civilisations have been around **(a)**…………………… (at, on, for, in) a paltry 12,000 years, barely a **(b)**…………….(many, few, some, each) seconds **(c)** …………………….(at, in, on, of) the geological clock. In that short amount **(d)** ……………(of, on, with, at) time, we've managed **(e)**……………………… (at, to, of, for) create quite a ruckus, etching our dominance **(f)**………………………… (at, in, off, over) nature with our villages, towns, cities and megacities. The rapid increase of human population has left us

battling with other species for limited resources.

6. Sadao Hoki's house **(a)**……………… (was, is, will, can) built on a spot of the Japanese
    coast **(b)**…………………(here, where, everywhere, anywhere) **(c)**……………………… (like, as, same,
    similar) a little boy he had **(d)**…………..(never, ever, often, seldom) played. The low, square stone house
    was set **(e)**………………(on, upon, in, at) rocks well **(f).**……………………(above, below, beneath, over) a
    narrow beach that was outlined with bent pines. His father had taken him often to the islands of those seas.

7. He smelled **(a)**………………… (so, as, like, as) bad that **(b)**…………………………… (all, every, none,
    each) of the other little woodland creatures would play **(c)**…………………………….. (on, of, from, with)
    him. She looked at him **(d)**…………………..(solemn, solemned, solemnly). She had
    not **(e)**…………………….. (forsee, forsaw, forseen, forseeing) this. Whenever he would go out to play,
    Roger **(f)**…………………………………………….. (remember, remembered, remembering, will
    remember) the humiliations of his own childhood. All of the other tiny animals would cry, "Uh-oh, here
    comes Roger Stinky Skunk".

8. It won't make my face **(a)**…………………… (change, changed, changes, changing). Do you know, one day,
    a woman **(b)**………………… (go, going, went, gone) by me **(c)**………………………….. (at, in, of, on) the
    street. I **(d)**………………….. (am, was, where, is) at a bus-stop and she was **(e)**…………………(along,
    with, in, without) another woman. She **(f)**…………….. (look, looks, looked, looking) at me, and she said,
    "Look at that, that's a terrible thing.

II. Rearrange the following words to make a meaningful sentence.
  1. of mankind / the habit / reading is / one of / resources / of / the greatest
  2. are / we enjoy / that / belong to us / than if / much more / they / borrowed / reading books
  3. book / formality / a certain considerate / must be treated / with / a borrowed
  4. no book / that / afraid to / you should / mark up / own / you are
  5. should begin / everyone / a private library / youth / collecting / in
  6. converse with / in / you / at any moment / a private library/ Socrates or Shakespeare / can
  7. the hand / your library / should be / as well as / free / accessible / to / to the eye / and
  8. one of / that of reading / known to / is / greatest / the / pleasures / man
  9. a rich variety / adventure and wisdom / the / world of books / has / of
  10. own / you / book / convenience / can enjoy / a / at your

III. The following passages have not been edited. There is one error in each line. Write the incorrect word and the correction against the correct question number. Remember to underline the word you have supplied. One is done as an example:

1. The International Monetary Fund maintain   e.g. maintain   <u>maintained</u>
   its forecast on weak global growth and   (a) ....
   warned that further stagnation did fuel   (b) ....
   more populist sentiment for trade and   (c) ....
   immigration that would stifled activity,   (d) ....
   productivity and innovation. In the late update   (e) ....
   of their Word Economic Outlook, the IMF   (f) ....
   said a dropped in US growth for 2016   (g) ....
   is due too a weak first-half performance.   (h) ....

2. Your voice has remained very subdue   e.g. subdue   <u>subdued</u>
   and other's voices are very loud, command,   (a) ....
   because they were order and you had   (b) ....
   followed them—despite you. Naturally   (c) ....
   only one voice is missing with you, and   (d) ....
   that is you; otherwise there is a wholly   (e) ....
   crowd. And that crowd is constant driving   (f) ....
   you mad, because one voice say, "Do this,"   (g) ....
   another voice says, "Never does that! Don't   (h) ....
   listen to that voice!"

3. The issue of capital punishment involve determining   e.g. involve   <u>involves</u>
   whether the execution of criminals are ever   (a) ....
   justified, and if so, on what circumstances   (b) ....
   it is permissible and how to determining   (c) ....
   the limits of a crime demand execution.   (d) ....
   It also involves the issue where the society   (e) ....
   believes in corrective justice nor retributive   (f) ....
   justice. The basic assumption from retributive   (g) ....
   nation of punishment in generally is that a   (h) ....
   criminal deserves punishment.

4. We live in times when incomes is rising.   e.g. is   <u>are</u>
   The economic boom of the last 25 years have   (a) ....
   created a grow tribe of erstwhile-middle   (b) ....
   class-turned-HNIs who earn much many than   (c) ....

they can spend. Born on the inflation and	(d)	....
scarcity-stricken 1960s and 70s, this well-paid adults	(e)	....
enjoy their new wealth, but is conservative in	(f)	....
their spending and investing habits. They swing	(g)	....
among confidence and caution when it comes to money.	(h)	....

5. A new Guineas World has been set with the
largest performing rock band in China before
953 musicians did a show together—most
twice the previous record. There was
six different music sections from the band,
including 349 singer, 154 guitarists, 151 drummers,
101 basists, 100 keyboards players and 98 wind
instruments. The band with The Beijing Contemporary
Music Academy was lead by singer-songwriter Cui Jian.

e.g.	with	for
(a)	....	....
(b)	....	....
(c)	....	....
(d)	....	....
(e)	....	....
(f)	....	....
(g)	....	....
(h)	....	....

6. Geoffrey Chaucer is consider by many
to be the 'Father for English Literature' and
the greatest poet of the Middle Ages. Borne
around 1343, he is the most famous in
The Canter Bury Tales, a series of story
(mostly in verse) based on a group of pilgrim
travelling with the shrine of Thomas Backet.
The pilgrims has a story-telling competition,
resulting in each of the tale being called by
the character telling them.

e.g.	consider	considered
(a)	....	....
(b)	....	....
(c)	....	....
(d)	....	....
(e)	....	....
(f)	....	....
(g)	....	....
(h)	....	....

7. William Wordsworth is born in 1770 and
helped developed a new literary movement
called Romanticism, which saw a new focus in
nature and emotion. Famous penning the
words "I wandered lonely like a cloud."
Wordsworth is the most strongly associate with
the lake District region on England, the beautiful
landscape of which was an big inspiration for him.
Wordsworth was Poet Laureate for 1843 until he died.

e.g.	is	was
(a)	....	....
(b)	....	....
(c)	....	....
(d)	....	....
(e)	....	....
(f)	....	....
(g)	....	....
(h)	....	....

8. The opening ceremony for the 2016 Summer Olympic
Games takes place in the Maracana stadium
on 5 August 2016 and is directed by Fernado
Meirelles, Daniela Thomas or Andrucha Waddington.
The ceremony highlights the aspects of Brazilian
history and culture and featured a segment narrate
by Fenanda Montenergo and Judi Dench with a
appeal to environmental conservation and prevent
global warming. The ceremony also features
the inaugural presentation of the Olympic Laurel.

e.g.	for	of
(a)	....	....
(b)	....	....
(c)	....	....
(d)	....	....
(e)	....	....
(f)	....	....
(g)	....	....
(h)	....	....

9. There is nothing much selfish
you can do than come for work sick.
You may get a gold star for show

e.g	much	more
(a)	....	....
(b)	....	....

your sniffling face with the office	(c)	....	....
and soldiering for the workday to	(d)	....	....
provide you value — but everyone	(e)	....	....
around you just get sick. You are	(f)	....	....
a inconsiderate work hazard, when	(g)	....	....
you brought your infectious illness to work.	(h)	....	....

10. Overeating is one of the more wonderful	e.g	more	most
practices among those which think that they	(a)	....	....
can afford it. In fact that is said that	(b)	....	....
near all those who can get as much	(c)	....	....
as he desire, overeat to their	(d)	....	....
disadvantage. This class of peoples could	(e)	....	....
save the great deal more food than	(f)	....	....
they can save by missing one meal	(g)	....	....
per week and also improving their health.	(h)	....	....

(*Delhi* 2016)

11. Scientists has found evidence	e.g	has	have
to support much owners have long	(a)	....	....
believed: man's best friend really do	(b)	....	....
understand some of which we are	(c)	....	....
saying. Researchers on Hungary	(d)	....	....
scanned the brains of dogs as it were	(e)	....	....
listening to their trainer spoke to	(f)	....	....
determine that parts of the brain they	(g)	....	....
use. They found that processed words to	(h)	....	....
the left hemisphere.			

12. Elimination for child lablour is undoubtedly	e.g.	for	of
one of the biggest challenges facing our	(a)	....	....
country. Various article of the constitution	(b)	....	....
prohibits the employment of children in	(c)	....	....
factories. Under Article 24, it has stated	(d)	....	....
that no child below the ages of 14	(e)	....	....
shall be employ in any factory or	(f)	....	....
mine or any another hazardous occupation	(g)	....	....
or work. Children should be provide opportunities	(h)	....	....
to develop in a healthy manner.			

13. Today, democracy is often assume to	e.g.	assume	assumed
be a liberal form at governance, a	(a)	....	....
form of representative democracy when the	(b)	....	....
ability of elect representatives and the	(c)	....	....
will of the majority to exercising decision	(d)	....	....
making power are subject to the rule of	(e)	....	....
law, and usually moderate by a constitution	(f)	....	....
which emphasise the protection of liberties,	(g)	....	....
freedoms and rights of individuals or minorities.	(h)	....	....

हिन्दी

निम्नलिखित प्रश्नों के उत्तर लिखें और अभ्यास करें :–

1. हालदार साहब का नेताजी की मूर्ति पर चश्मे को निहारना उनकी किस भावना को स्पष्ट करता है?

2. बालगोबिन भगत के व्यक्तित्व का वर्णन करें।

3. 'लखनवी अंदाज' पाठ में लेखक द्वारा खीरा खाने की प्रक्रिया का वर्णन अपने शब्दों में करें।

4. 'फ़ादर को मानवीय करूणा की दिव्य चमक क्यों कहा है?

5. लेखिका मन्नू भंडारी का स्वतंत्रता आंदोलन में क्या योगदान रहा। पाठ के आधार पर लिखें।

6. बिस्मिल्ला खाँ साहब की संगीत–साधना के प्रति आपका क्या दृष्टिकोण है?

7. सूर के पद' पाठ के आधार पर योग–साधना के प्रति गोपियों के भावों को स्पष्ट करें।

8. राम लक्ष्मण परशुराम – संवाद' पाठ का व्याख्या सहित पठन करें।

9. 'उत्साह' पाठ में बादलों को किसका प्रतीक माना गया है?

10. 'अट नहीं रही है' पाठ में कौन से माह के सौन्दर्य का वर्णन किया गया है?

11. बच्चे की दंतुरित मुस्कान का कवि के हृदय पर क्या प्रभाव पड़ता है।

12. माँ ने बेटी को क्या–क्या सीख दी और क्यों?

13. संगतकार पाठ का उद्देश्य अपने शब्दों में लिखें।

14. 'माता का आँचल' पाठ से, ग्रामीण परिवेश का वर्णन है, आज गाँवों में किस प्रकार के परिवर्तन दृष्टिगत होते हैं।

15. जॉर्ज पंचम की नाक लगाने के लिए क्या–क्या प्रयास किये गए?

16. 'साना–साना हाथ जोड़ि' पाठ के आधार पर लेखिका द्वारा वर्णित गंतोक के सौंदर्य का वर्णन करें।

17. सभी रसों का स्थायी भाव बताते हुए 2–2 उदाहरण लिखें।

18. पाँच कर्तृवाच्य वाक्यों को कर्मवाच्य में तथा पाँच कर्तृवाच्य वाक्यों को भाववाच्य में परिवर्तित करें।

19. किन्हीं पाँच वाक्यों को सरल से संयुक्त और मिश्रित में परिवर्तित करें।

20. दो–दो संज्ञा सर्वनाम, विशेषण, क्रिया, संबंधबोधक समुच्चय बोधक, विस्मयादि बोधक, क्रिया विशेषण शब्दों का पद परिचय लिखें।

MATHEMATICS

Solve the following questions.
1. If HCF (a,b)=12 and axb=1800, then find LCM (a,b).
2. In $\Delta\ ABC$, If x and y are points on AB and AC respectively such that $\frac{AX}{XB}=\frac{3}{4}$,
   AY=5 and YC=9, then state whether XY and BC parallel or not.
3. Verify whether 2,3 and $\frac{1}{2}$ are the zeros of the polynomial p(x)=2x^3-11x^2+17x-6
4. If s_n denotes, the sum of the first n terms of an A.P. prove that $s_{12} = 3(s_8-s_4)$.
5. A paper is in the form of rectangle ABCD in which AB=20 cm, BC=14 cm. A semi circular portion with BC as a diameter is cut off. Find the area of the remaining part.
6. All the black face cards are removed from the pack of 52 cards. Find the probability of getting
   a) Face card   b) Red card   c)Black card   d) King.
7. To a circle of radius 4 cm, draw two tangents which are inclined to each other at an angle of 60^0.
8. If the radius of circle is 6 cm and the length of an arc is 12 cm. Find the area of the sector.
9. Show that: $cosec^2\theta - tan^2\ (90 - \theta) = sin^2\theta + \sin (90 - \theta)$.
10. Construct a right triangle whose hypotenuse and one side measure 10 cm and 8 cm respectively. Then

construct another triangle whose side are $\frac{4}{5}$ times the corresponding side of the triangle.

11. If the point P(x,y) is equidistant from the point Q(a+b, b-a) and R(a-b , a+b), then prove that bx=ay.
12. If one zero of a polynomial $3x^2-8x+2k+1$ is seven times the other, find the value of k.
13. A cubical block of side 10 cm is surmounted by a hemisphere. What is the largest diameter that the hemisphere can have? Find the cost of painting the total surface area of solid so farmed, at the rate of rupees 5 per 100 sq. m (use π=3.14).
14. Prove that $(\cot\theta-\text{cosec}\theta)^2 = \frac{1-cos\theta}{1+cos\theta}$.
15. On annual day of a school, 400 students are participated in the function. Frequency distribution showing their ages as shown in the following table:

Age (in years	5-7	7-9	9-11	11-13	13-15	15-17	17-19
Number of studnts	70	120	32	100	45	28	5

Find mean and median of the above data.
16. The sum of first 20 terms of an A.P. is 400 and sum of first 40 terms is 1600. Find the sum of first 10 terms.
17. The ordinate of a points A on y-axis is 5 and B has co-ordinate (-3,1). Find the length of AB.
18. A right circular cone of radius 3 cm, has a curved surface area of 47.1 cm^2. Find the volume of the cone .
19. An electric pole is 10 m high. A steel wire tied to top of the pole is affixed at a point on the ground to keep the pole up right. If the wire makes an angle of 45^0 with the horizontal through the foot of the pole, find the length of wire (use √2=1.414).
20. Find the nature of roots of the quadratic equation: $13\sqrt{3}x^2+10x+\sqrt{3}=0$

SCIENCE

Answer the following questions.
1. What is the highest and the lowest total resistance that can be secured by combinations of four coils of resistence 4Ω, 8Ω, 12Ω and 24Ω.
2. What is the function of earth wire? Why is it necessary to earth metallic appliances?
3. An electric heater of resistance 8Ω draws 15A from the service mains 2 hours. Calculate the rate at which heat is developed in the heater.
4. The far point of a myopic person is 80 cm in front of the eye. What is the nature and power of the lens required to correct the problem of the image..
5. An object is placed at a distance of 10 cm from a convex mirror of focal length 15 cm. Find the position and nature of the image formed.
6. A doctor has pre scribed a corrective lens of power +1.5 D. Find the focal length and the nature of the lens.
7. A convex mirror used for rear-view on an automobile has a radius of curvature of 3m. If the bus is located at 5m from this mirror, find the position, nature and size of the image.
8. Write one equation each for decomposition reactions where energy is supplied in the form of heat, light and electricity.
9. Why does dry HCl gas not change the colour of the dry litmus paper?
10. Show the formation of NaCl and MgO by the transfer of electrons.
11. Draw the structure of the following compounds.
    a. Propanone   b. Hexanal   c. Chloropropane.   d. Butanoic acid.
12. Name two elements that have a single electron in outermost shell.
13. What is the role of Nickel in addition reaction?
14. How could the Modern periodic table remove various anomalies of Mendeleev periodic table?
15. What is the role of the following in digestion: a. Villi   b. Intestinal juice   c. Salivary amylase enzyme   d. Gastric juice.
16. Name the receptor present in our tongue, skin, eye and nose.

17. What is the fate of the following after fertilisation in plants?
    a. Sepals and petals
    b. Ovary.
18. What are the various evidences of evolution?
19. What will happen if we kill all the organisms in one trophic level?
20. Why is reuse better than recycle?
21. Why is damage to the ozone layer a cause for concern? What steps are being taken to limit this damage?

SOCIAL SCIENCE

Answer the following questions.
 1. Which power dominated the nation-building process in Germany?
 2. Which idea, other than economic exploitation, was behind French colonisation of Vietnam?
 3. State an important characteristic of the oldest Japanese book, Diamond Sutra.
 4. Sate the hotly debated issue around which the novel Indulekha revolved.
 5. Wind energy received in abundance in western Rajasthan and Gujarat has not been so far utilised and developed to the maximum. It falls in which category of resources?
 6. What is the technique of rainwater harvesting?
 7. Write any one prudential reason for which power sharing is desirable.
 8. Identify the condition when both the parties in a barter economy have to agree to sell and buy each other's commodities. What is it called?
 9. Write the development goals for farmers who depend only on rain for growing crops.
10. A group of companies in India wishes to import high quality ACs from South Korea but have to pay a huge import tax on them which would make the ACs very expensive leading to a decline their sale. Ascertain the role of the import tax in this situation.
11. Sonia buys a packet of biscuits and finds details about ingredients used, price, batch number etc. printed on it except the expiry date. Under which right of consumers she can claim to know this information from the manufacturer?
12. What was cowries?
13. Who produced a music book that had a picture on the cover page announcing the Dawn of the Century?
14. Name the oldest Japanese book printed.
15. What was the price of Henry Fielding's Tom Jones (1749) issued in six volumes?
16. Give a prominent example of a region with a low rainfall and which is drought-prone.
17. Under which type of resource can tidal energy be put?
18. What do you understand by The Black Power?
19. What does development mean for a landless rural labourer?
20. Under which economic sector does the production of a commodity through the natural process come?

FIT

1. Make an IT Application Report File containing real life assignments using a Database Management Tool and HTML.
    a) 5 Database Solutions
    b) 8 HTML source code along with browser view

Do all your holiday homework in respective notebooks.