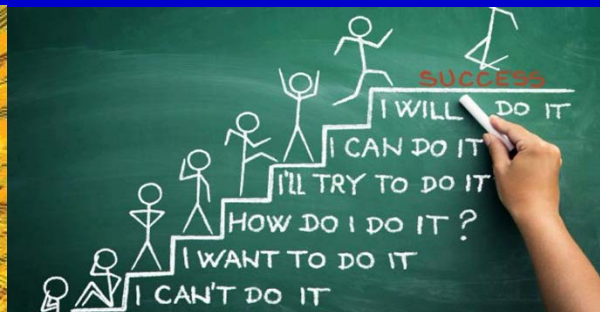# THE AIR FORCE SCHOOL

Dear Students

With summer vacation round the corner, let's prepare ourselves not just for relaxation but also to utilize the given time in creative and constructive ways. It is that time of the year again when we can do things which we are unable to do during the regular routine days.

- ➢ *Read some good books to enhance your language and communication skills.*
- ➢ *"A healthy mind lives in a healthy body". Indulge in some outdoor and indoor sport and to channelize energies constructively.*
- ➢ *Watch different informative channels like 'The National Geographic', 'Animal Planet' etc.*
- ➢ *Do all the daily chores yourself and appoint a specific time to do homework every day.*
- ➢ *Explore the culture and heritage of your city by visiting heritage sites like monumnents and peep into the rich history.*
- ➢ *The Home work should be done as per the instructions given below:*
  - ❖ *There are two assignments given as the Holiday Home Work (Assignment-1 and Assignment-2)*
  - ❖ *Assignment 1 will be evaluated as the 1st home work of July.*
  - ❖ *Assignment-2 is for practice and to be done seperately in the practice notebook.*
  - ❖ *For English, the students are also required to make a model or a chart as revisional assignment.*
  - ❖ *These assignments are for practice/ revision for PT-1 which will be examined by the teacher before PT-1.*

Have a fun-filled vacation!!!

HOLIDAY HOME WORK

SUBJECT – ENGLISH

CLASS – IX

Date of submission : 01st Week of July

Summer Holidays' Home Work- Revision Assignment

Q.1. Read the passage below and attempt the questions that follow:

THE STORY OF ELECTRONICS

1   The other day, I couldn't find my computer charger. My computer is my lifeline to my work, my friends and my music. So I looked everywhere, even in that drawer where this lives. I know you have one too, a tangle of old chargers, the sad remains of electronics past. How did I end up with so many of these things? It's not like I'm always after the latest gadget. My old devices broke or became so obsolete I couldn't use them anymore. And not one of these old chargers fits my computer. This isn't just bad luck. It's bad design. I call it "designed for the dump."

2   "Designed for the dump" sounds crazy, right? But when you're trying to sell lots of stuff, it makes perfect sense. 'Designed for the dump' means making stuff to be thrown away quickly. Today's electronics are hard to upgrade, easy to break, and impractical to repair. My DVD player broke and I took it to a shop to get fixed. The repair guy wanted $50 just to look at it! A new one costs $39.

3   See, electronics start where most stuff starts, in mines and factories. Many of our gadgets are made from more than 1000 different materials, shipped from around the world to assembling plants. There, workers turn them into products, using loads of toxic chemicals, like PVC, mercury, solvents and flame retardants. Today this usually happens in far off places that are hard to monitor. IBM's own data revealed that its workers making computer chips had 40% more miscarriages and were significantly more likely to die from blood, brain and kidney cancer. It turns out that the high-tech industry isn't as clean as its image.

4   So, after its toxic trip around the globe, the gadget lands in my hands. I love it for a year or so and then it starts drifting further from its place of honor on my desk or in my pocket. Maybe it spends a little time in my garage before being tossed out. And that brings us to disposal, which we think of as the end of its life. But really it's just moved on, to become part of the mountains of e-waste we make every year.

5   Computers, phones, TVs and all such stuff, is just waiting to release all their toxics when we throw them away. Some of them are slowly releasing toxins even while we're using them. You know those fat old TVs that people are chucking for high def flat screens? They each have about 5 pounds of lead in them! So almost all this e-waste either goes from my garage to a landfill or it gets shipped overseas to the garage workshop of some guy in Guiyu, China whose job it is to recycle it. Workers,

without protective gear, sit on the ground, smashing open electronics to recover the valuable metals inside and chucking or burning the parts no one will pay them for. So while I'm on to my next gadget, my last gadget is off poisoning families in Guiyu or India or Nigeria.

6   Each year we make 25 million tons of e-waste which gets dumped, burned or recycled. And that recycling is anything but green. So are the geniuses who design these electronics actually evil geniuses? I don't think so, because the problems they're creating are well hidden even from them. You see, the companies they work for keep these human and environmental costs out of sight and off their accounting books.   [from 'The Story of Stuff' by *Annie Leonard*]

 a) The speaker says that today's electronics are 'designed for the dump' because _____
 b) One of the most horrifying truth about the so called high-def flat screen T.V.s is that _____
 c) The speaker refuses to call the designers of these gadgets 'evil geniuses' because

     _____
 d) Name any three kinds of material that are used to make electronic products.
 e) What does IBM's data reveal about its own workers?
 f) The word in the passage that means the same as *outdated* is _____
 g) A word in the passage that can be replaced with *unreal* _____
 h) A word in the passage that means *removal* _____
 i) Supply an antonym of the word *genius* _____
 j) A word in the passage that means *enhance* _____
     _____

Q.2. Read the passage below and answer the questions that follow:

THE BIRTH OF SHERLOCK HOLMES

1   It wasn't Dr. John Watson who wrote the books about his companion Sherlock Holmes, even though you might think so if you read the books about the famous detective. The true author was Arthur Conan Doyle, born in 1859. Like so many other authors, he read everything he could find. But the library allowed him to borrow only one book at a time, so he had to return to the library several times in one day.

2   Like Watson, Conan Doyle was a doctor. While studying to become a doctor, he found himself in a class where the lecturer was Dr Joseph Bell. It was Bell who became Conan Doyle's inspiration when he wrote the stories about Sherlock Holmes. Bell taught his students how to use their eyes, ears, brain, and perception to find out what problems their patients had. Bell thought that you could treat someone who's sick by understanding the small details that differed the sick from the healthy. It turned out that Bell could find out more about his patients by just looking at them compared with Conan Doyle who had to ask them questions.

3   Conan Doyle didn't make much money by working as a doctor - he made more money from selling his stories to magazines. Almost no patients visited him because an unwritten rule among doctors said they weren't allowed to advertise. But he could use the time to write stories. But Conan Doyle didn't become famous because the magazines didn't allow him to publish his stories with his real name. Conan Doyle had to write a book. He finished a book in 1885, but it was rejected by the publishing houses. Another book was lost in the mail on its way to the publisher.

4   Conan Doyle had learned a lot from his first two books and was ready to try a third time. He wanted to write a book about a detective. He recalled his old lecturer Bell and came up with a detective who could solve cases by observing details. The name of this detective was Sherrinford Holmes, named after the American doctor Oliver Wendell Holmes. Conan Doyle would later change the name to Sherlock Holmes in the following 56 shorter stories and 4 books about the detective. Conan Doyle modeled Holmes's methods and mannerisms on those of Dr. Joseph Bell, who had been his professor at the University of Edinburgh Medical School. In particular, Holmes's ability to gather evidence based upon his sharp skills of observation and <u>deductive reasoning</u> paralleled Bell's method of diagnosing a patient's disease.

5   Conan Doyle carried with him a notebook that he filled with thoughts about stories he wanted to write. He found these thoughts while walking, riding a bike, and when playing cricket or tennis. He always added tiny details and loose thoughts that in the future could become a real story. To this notebook, he added all the books he read and he also found inspiration from these books.

6   Conan Doyle couldn't visit London, so he took a map of London and made up the stories. He never visited the now famous Baker Street in London and was surprised when he met a fan who had found the real address. He liked to include details in the books from his own life. It could be the name of a town where a relative lived, a topic he had discussed, or a book he had read.

7   While writing a story about Sherlock Holmes, Conan Doyle began with the end. When he made up a name on a character in the story, he could forget the name after a few pages and just left a blank area because he didn't have the time to go back and look up the name. Conan Doyle wrote about 3000 words each day. He began after breakfast and ended at five to eight o'clock in the evening. He could write in a room filled with talking people or on the train. To save time, he tried to not lift the pen from the paper, and he also let his sister write on a typewriter what he had written on a paper.

8   He often forgot the details, so the Sherlock Holmes books are filled with factual errors. The story can jump several months in time even though only a day has passed. This could actually have helped Sherlock Holmes to become famous since certain fans tend to read the books several times to find these different errors.

Answer the following in brief paragraphs:
  a) Why would Arthur Conan Doyle return to the library several times a day?
  b) What did Dr. Bell teach his students?
  c) Why did no patient visit Conan Doyle?
  d) What happened to the first two books he wrote?
  e) Describe what has been said about his notebook.
  f) The original name that Conan Doyle gave to his character Sherlock Holmes was

  _____
  g) According to Dr Bell, you can tell the difference between the sick and the healthy by looking at

  _____
  h) He added details in his book from _____
  i) He could write in a noisy room. This statement is true or false? _____
  j) He made up the stories of London with the help of maps. This is true or false? _____
  k) A word that can replace *errors* (para 8) _____
  l) A word that can replace *evidence* para 4) _____
  m) A word that can replace *perception* (para 2) _____

n) A word that can replace *tend* (para 8) _____
o) A word that can replace *mannerisms* (para 4) _____

_____

Q.3. You are Sonali/Sohan of Class IX living in a hostel in Gwalior. Write a letter to your mother describing how you prepared a snack for yourself for the first time in your room.

Q. 4. The problem of parking is increasing day by day, due to rise in population and the number of vehicles. Every day you come to hear of various incidents of road rage and quarrels that this problems causes. Write a letter to the editor of a leading national daily, highlighting the matter and suggesting a solution. You are Harpreet Singh, President of the RWA, Delhi.

_____

Q.5. Read the following dialogue and then complete the report by choosing the correct option from the ones given below. Write your answers in your answer-sheet with correct blank number. Do not copy the dialogue and the report. [these will be of 1 mark each]

Doctor : How are you feeling now? Raghu : Much better, sir. Doctor : Are you taking the medicines regularly? Raghu : yes, sir.

 The doctor asked Raghu (a)_____. Raghu replied that (b)_____ much better. The doctor further asked Raghu (c)_____ the medicines regularly. Raghu replied in the affirmative.

(a) (i) that how he was feeling (ii) how he was feeling . (iii) how you are feeling . (iv) how was he feeling.
(b) (i) I am feeling (ii) I was feeling (iii) he is feeling (iv) he was feeling
(c) (i) if you are taking (ii) if he is taking (iii) that he was taking (iv) if he was taking

_____

 Q.6. The following passage has not been edited. There is one error in each line. Write the incorrect word and the correction in your answer sheet against the correct question number. Remember to underline the word you have supplied.

	Before	Omitted	After
The spirit patriotism, sacrifice and service	eg. spirit	of	patriotism
towards our country must be guide to us and	(a) _____		
should inspire us emerge as great heroes.	(b)_____		
Every single Indian has role to play in	(c) _____		
building up nation for the future generations.	(d) _____		

_____

Q.7. Complete the following paragraph by choosing the correct word from the options given below:

While in hiding, Anne kept a diary in (a)_____ she recorded her fears, hopes, and experiences. Found in the secret apartment after the family (b)_____, the diary was kept for Anne by Miep Gies, one of the people who had helped (c)_____ the Franks. I t was published after the war in many languages and is used in thousands of middle school and high school curricula in Europe and the

Americas. Anne Frank (d)_____ a symbol for the lost promise of the children who died in the Holocaust.

(a) (i)that (ii)which (iii) whom (iv)where
(b) (i) was arrested (ii)get arrested (iii)had arrested (iv)were arrested
(c) (i) in hiding   (ii) to hiding   (iii) for hiding   (iv) hide
(d) (i) will become   (ii) can become (iii) has become (iv) became

_____

Q.8. Read the following extracts and answer the questions:

Two roads diverged in a yellow wood,
And sorry I could not travel both
And be one traveler, long I stood
And looked down one as far as I could
To where it bent in the undergrowth
a. What is the setting of the extract?
b. Why do you think the poet there for long?
c. What is meant by 'undergrowth'?
d. How is this extract an example of symbolism?

_____

Q.9. *The book was usually some popular Tamil thriller running to hundreds of pages.*
a.   Who is reading such books?
b.   How do these books influence him?
c.   Describe his character in three sentences.
d.   What do you understand by 'running to hundreds of pages'?

_____

Q.10. Answer the following questions in about 30 to 40 words:
a.   How was Toto an expensive deal for grandfather?
b.   Describe Kezia's father's character in your own words.
c.   How did Saint Peter punish the old woman?
d.   What does the wind symbolise in the poem 'Wind'?
e.   What is the nature of the poet in the poem 'The Road not Taken'?
f.   Describe the use of humour in the story 'The Snake and the Mirror'.
g.   Do you agree with Margie that schools today are more fun than the schools in the story? Why?
h.   Why was Margie doing badly in Geography? What did the County Inspector do to help her?

_____

Q.11. Attempt the following questions in 100-150 words:
a.   You are Margie. Write a letter to your mother telling her about Tom's discovery of the book. Describe the book to her. Also tell her why you feel that today's schools are better than hers.
b.   Strong determination, motivation and right direction helped Bismillah Khan in being what he was. Do you agree? How important are these traits in our life?
c.   "The Happy Prince was a compassionate toward the poor". Justify, using instances from the story.
d.   Evelyn is a source of inspiration for all. Justify. Describe her achievements.
e.   "Goodness can never be destroyed." Do you agree? Explain why with reference to the story 'The Happy Prince'.

_____

SUBJECT - HINDI

ASSIGNMENT - 1

प्र.1 निम्नलिखित विषयों पर लगभग 100 शब्दों में अनुच्छेद लिखिए:–

क. स्वच्छ भारतः स्वस्थ भारत

ख. परिश्रम ही जीवन का आधार

प्र.2 निम्नलिखित प्रश्नों के उत्तर 80–100 शब्दों में लिखिएः

क. रैदास के पदों का केंद्रीय भाव लिखिए।

ख. रैदास के पदों में नीहित काव्य–सौंदर्य स्पष्ट कीजिए।

ग. रहीम ने प्रेम–संबंधों में टूटन न आने की सलाह दी है। क्या आप ऐसा सोचते हैं कि एक बार गाँठ पड़ जाने पर रिश्ते समान्य नहीं रहते? तर्क सहित उत्तर लिखिए।

घ. रहीम ने किस दृष्टांत द्वारा सिद्ध किया है कि बिगड़ी बात नहीं बन सकती।

ड. रहीम के अनुसार जीवन की सार्थकता किसमें हैं?

च. 'दुख मनाने का भी एक आधीकार होता है' पठित पाठ के आधार पर अपना मत लिखिए।

छ. 'दुख का अधिकार' पाठ का शीर्षक कहाँ तक सार्थक है? स्पष्ट कीजिए।

ज. जैसे वायु की लहरें कटी पतंग को सहसा भूमि पर गिरने नहीं देती, उसी तरह खास परिस्थितियों में हमारी पोशाक हमें झुक सकने से रोके रहती है – ऐसा लेखक ने क्यों कहा है?

झ. गिल्लू जैसा लघुकाय जीव भी प्रेम को समझकर उसकी प्रतिक्रिया का आभार प्रकट करना चाहता है, कैसे? गिल्लू कहानी के आधार पर लिखिए।

ण. पशु–पक्षियों को पालना आपकी दृष्टि में कहाँ तक उचित है? अपना अनुभव लिखिए।

ASSIGNMENT - 2

प्रश्न 1.निम्नलिखित शब्दों का वर्ण–विच्छेद कीजिए।

क. विस्तार

ख. प्राकृतिक

ग. स्वतंत्रता

घ. वैज्ञानिक

ड. क्षत्रिय

प्रश्न 2.निम्नलिखित शब्दों में अनुस्वार या अनुनासिक का प्रयोग कर उन्हें पुनः लिखिए।

क. चिड़िया _____

ख. अत्यत _____

ग. दड _____

घ. चौक _____

ड. वदना _____

प्रश्न 3.शब्दों को अनुस्वार लगाकर मानक रूप लिखिए।

क. सम्वाद _____

ख. सम्बन्ध _____

ग. चञ्चल _____

घ. झण्डा _____

ड. अड्क _____

प्रश्न 4.निम्नलिखित शब्दों में उपयुक्त स्थानों पर नुक्ते का प्रयोग करके उन्हें पुनः लिखिए।

क. फसाद _____

ख. विजन _____

ग. ट्रेजडी _____

घ. परहेज _____

ड. दफतर _____

च. फोटोग्राफर _____

प्रश्न 5.निम्नलिखित शब्दों में अनुस्वार, अनुनासिक अथवा नुक्ते का प्रयोग कीजिए।

क. दर्जा   बधन   थालिया

ख. सकोच   काच   खिलाफत

ग. फायदा   मुह   गगा

प्रश्न 6.निम्नलिखित प्रश्नों के उत्तर लिखिए। (20–25)

क. रैदास की भक्ति भावना पर प्रकाश डालिए।

ख. रैदास के दूसरे पद का प्रतिपाद्य लिखिए।

ग. रहीम के अनुसार सागर की अपेक्षा पंक–जल क्यों श्रेष्ठ है?

घ. मोती, मानुष, चून के संदर्भ में पानी का महत्व स्पष्ट कीजिए।

ड. व्यक्ति के सुख–दुख में समाज की क्या भूमिका होती है?

च. संभ्रांत महिला को दुख मनाने का अधिकार क्यों मिला?

छ. भगवाना कौन था उसकी मृत्यु कैसे हुई।

ज. लेखिका को गिलहरी का बच्चा कहाँ और किस हालत में मिला?

झ. गिल्लू के घर के लिए लेखिका ने क्या प्रबंध किया?

ण. गिल्लू लेखिका को चौंकाने के लिए क्या करता था?

SUBJECT – MATHEMATICS

ASSIGNMENT – 1

CHAPTER 1 & 2

Number System & Polynomials

(1)   If the polynomial p(x) is divided by ax + b, then what is the remainder by Remainder theorem?

(2)   If $p(x) = 6x^2 - x + 1$ and $q(x) = x^2 + x + 1$, then find $\dfrac{p(1)}{q(1)}$

(3)   Find the value of $\dfrac{\sqrt{2}}{2+\sqrt{2}}$ to three places of decimal, if it is given that $\sqrt{2} = 1.414$

(4)   If $x^5 - 3x^4 - ax^3 + 3ax^2 + 2ax + 4$ is exactly divisible by (x – 2) then find the value of a.

(5)   Factorize x² - y² + 6y – 9 using suitable identity.

(6)   If $a + b = 10$ and $ab = 21$, find the value of $a^3 + b^3$

(7)   If both a and b are rational numbers, find the values of a and b in each of the given equality: $\dfrac{\sqrt{2}+\sqrt{3}}{3\sqrt{2}-2\sqrt{3}}$ = a – b$\sqrt{6}$

ASSIGNMENT - 2

NUMBER SYSTEM & POLYNOMIALS

(1) Find three rational numbers between $\frac{-6}{5}$ and $\frac{1}{9}$

(2) Find the decimal representations of (a) $\frac{-16}{45}$ (b) $\frac{327}{500}$

(3) Without dividing, state what kind of decimal representations do the following rational numbers have (a) $\frac{7}{8}$ (b) $\frac{4}{15}$ (c) $\frac{-22}{99}$ (d) $\frac{3}{40}$

(4) Express each of the following decimals in the form $\frac{p}{q}$, $q \neq 0$:

(a) $0.\overline{35}$ (b) $1.\overline{27}$ (c) $23.\overline{43}$ (d) $0.12\overline{3}$ (f) $0.4\overline{7}$

(5) Insert a rational and an irrational number between (i) $\sqrt{2}$ and $\sqrt{3}$ and (ii) $\sqrt{3}$ and $\sqrt{5}$

(6) Give two rational numbers between 0.232332333233332… and 0.212112111211112…

(8) Find a rational and an irrational number between 0.1 and 0.12

(9) Examine whether the following numbers are rational or irrational:

(a) $\sqrt{2} + \sqrt{3}$ (b) $(\sqrt{2} - 2)^2$ (c) $-\sqrt{64}$ (d) $\sqrt{9/27}$ (e) $(2-\sqrt{2})(2+\sqrt{2})$

(f) $\sqrt{1.69}$ (g) $\sqrt{27}$

(10) Represent $\sqrt{3}$ on the number line.

(12) Represent $\sqrt{10.5}$ on the number line.

(13) Simplify: (c) $(\sqrt{5} + \sqrt{2})^2$ (d) $(2\sqrt{5} + 3\sqrt{2})^2$

(14) Rationalize the denominator in each of the following:

(a) $\frac{1}{3+\sqrt{2}}$ (b) $\frac{1}{7+3\sqrt{2}}$

(15) Find the values to three places of decimal, of each of the following if it is given that $\sqrt{2} = 1.414$, $\sqrt{10} = 3.162$

(a) $\frac{1}{\sqrt{10}}$ (b) $\frac{\sqrt{3}}{\sqrt{6}}$

(16) If both a and b are rational numbers, find the values of a and b in the equality:

$\frac{5 + \sqrt{3}}{7 - 4\sqrt{3}} = 47 a + \sqrt{3} b$

(17) Simplify: $\frac{3}{5 - \sqrt{3}} + \frac{2}{5 + \sqrt{3}}$

(18) Prove that : $\frac{1}{3 - \sqrt{8}} - \frac{1}{\sqrt{8} - \sqrt{7}} + \frac{1}{\sqrt{7} - \sqrt{6}} - \frac{1}{\sqrt{6} - \sqrt{5}} + \frac{1}{\sqrt{5} - 2} = 5$

(19) If $x = \frac{\sqrt{3} + \sqrt{2}}{\sqrt{3} - \sqrt{2}}$ and $y = \frac{\sqrt{3} - \sqrt{2}}{\sqrt{3} + \sqrt{2}}$, find $x^2 + y^2$

(20) Show that $\sqrt{5}$ is an irrational number.

(21) Are the expressions (i) $z + \frac{3}{z}$ and (ii) $\sqrt{3}x - 3$ polynomials or not? Give reasons

(22) Write the degree of (i) $7t - 8$ (ii) 9   (iii) $y^2 + 8$ (iv) m^3 (v) 0

(23) Find the zeroes of (i) $3x - 6$ (ii) $ax + b$; $a \neq 0$, a, b are real numbers

(24) State Remainder theorem and Factor theorem.

(25) If $p(x) = 6x^2 - x + 1$ and $q(x) = x^2 + x + 1$, then find $p(2) + q(2)$

(26) Divide: (a) $x^4 + 2x^3 - 3x^2 + x - 1$ by $(x - 2)$ (b) $4x^3 + 3x^2 + 2x + 3$ by $(x + 4)$

(27) Find the remainder when p(x) is divided by g(x): (using remainder theorem)

$p(x) = x^4 - 3x^2 + 2x + 1$; $g(x) = (x - 1)$

(28) Using suitable identities, find the following:

   (a) $(3x + 4)(3x - 5)$ (b) 95×96 (c)$(105)^2$ (d) $(94)^2$ (e) $(104)^3$

(29) Using suitable identities, find the expansion of each of the following:

(a) $(3a + 4b + 5c)^2$ (b) $(5p - 3q)^3$ (c) $(4a + 2b)^3$

(30) Factorize the following using suitable identities:

(a) $9x^2 - 24x + 16$

(b) $4x^2 + 12x + 9$

(c) $a^4 - b^4$

(d) $x^2 - y^2 + 6y - 9$

(e) $1 - 2ab - (a^2 + b^2)$

(f) $p^2 + q^2 + 9r^2 + 2pq + 6pr + 6qr$

(g) $x^2 + 4 + 9z^2 + 4x - 6xz - 12z$

(h) $27x^3 + 54x^2y + 36xy^2 + 8y^3$

(i) $x^3 - 12x(x-4) - 64$

(j) $a^3 + 27$

(k) $x^3 + 8y^3 - z^3 + 6xyz$

(31) Factorize:

(a) $12x^2 - 7x + 1$ (b) $15x^2 - 19x - 22$ (c) $x^2 + xy + xz + yz$

(32) Using Factor theorem, factorize the following:

(a) $2x^3 - 3x^2 - 8x - 3$ (b) $x^3 + 13x^2 + 31x - 45$

(33) If $3x + \frac{2}{x} = 7$, then find $\left(9x^2 - \frac{4}{x^2}\right)$

(34) Let R_1 and R_2 are the remainders when the polynomials $x^3 + 2x^2 - 5ax - 7$ and $x^3 + ax^2 - 12x + 6$ are divided by $x + 1$ and $x - 2$ respectively. If $2R_1 + R_2 = 6$, find the value of a.

(35) Show that $x + 1$ and $2x - 3$ are factors of $2x^3 - 9x^2 + x + 12$.

ASSIGNMENT - 1

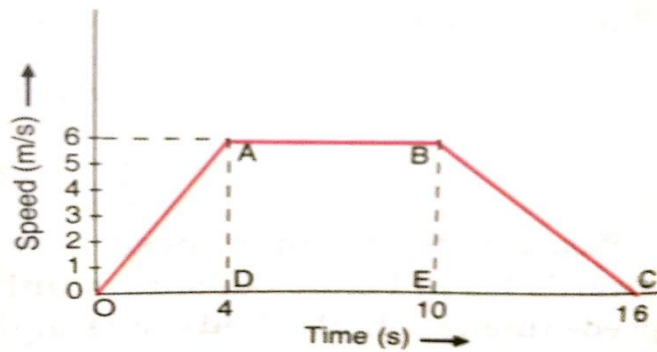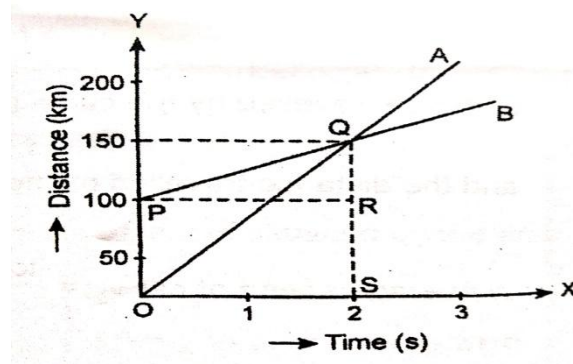Q1- A body goes round the sun with constant speed in a circular orbit. Is the motion uniform or accelerated?

Q2- What can you say about the motion of a body if its speed- time graph is a straight line parallel to the time axis?

Q3- What does the slope of a distance- time graph indicate?

Q4- What type of motion is represented by the tip of the 'seconds' hand' of a watch?

Q5- A car X travels a distance of 460 km in 5 hours and car Y travels a distance of 574 km in 7 hours. Which car travels faster?

Q6- If a bus travelling at 40 m/s is subjected to a steady deceleration of 5 m/s^2, how long will it take to come to rest?

Q7- Explain why, the motion of the body which is moving with constant speed in a circular path is said to be accelerated?

Q8- A cheetah starts from rest and accelerates at 2m/s^2 for 10 seconds. Calculate:

    (a)   the final velocity.

    (b)   the distance travelled.

Q9- (a)   Write the three equations of uniformly accelerated motion. Give the meaning of each symbol which occurs in them.

    (b)   Derive the equation: $s = ut + \frac{1}{2}at^2$ by using graphical method.

Q10- A car acquires a velocity of 72 km per hour in 10 seconds starting from the rest. Find

    (a)   the acceleration.

    (b)   the distance travelled in this time.

Q11- (a)   What is meant by uniform circular motion? Give two examples.

    (b)   An artificial satellite is moving in a circular orbit of radius 42250 km. Calculate its speed if it takes 24 hours to revolve around the earth.

Q12- A ball gently dropped from a height of 20 m. If its velocity increases uniformly at the rate of 10 m/s^2, with what velocity will it strike the ground? After what time will it strike the ground?

Q13- Study the speed-time graph of a body given below and answer the following questions:

(a) What type of motion is represented by OA?
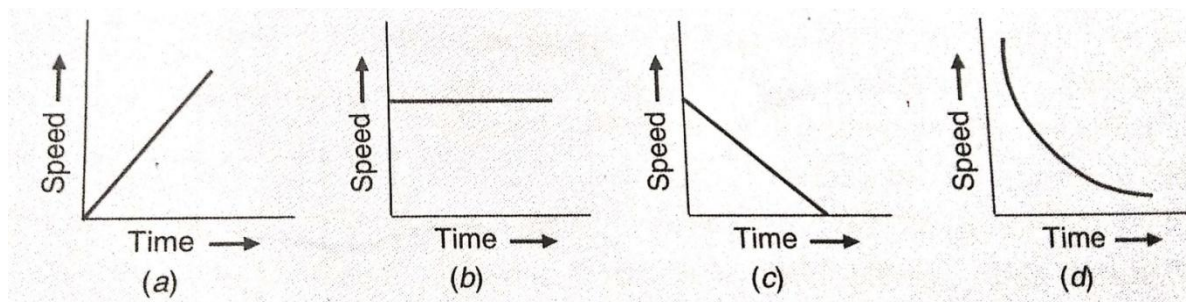
(b) What type of motion is represented by AB?

(c) What type of motion is represented by BC?

(d) Calculate the acceleration and retardation of the body?

(e) Find out the distance travelled by the body from A to B.

Q14- The distance- time graphs of two trains A and B are given below. The trains start simultaneously in the same direction.

(a) How much ahead of A and B when the motion starts?

(b) What is the speed of B?

(c) When and where will A catch B?

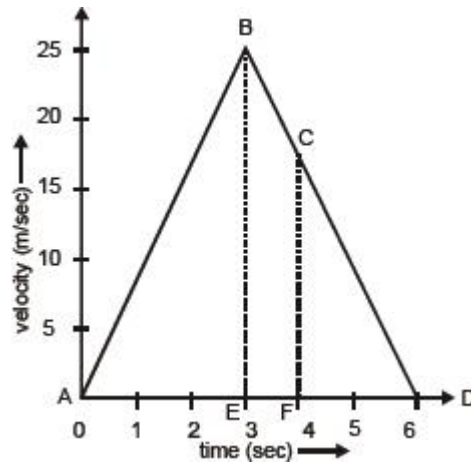(d) What is the difference between the speeds of A and B?

Q15- What type of motion is represented by each one of the following graphs?

ASSIGNMENT – 2

1. a)   Define uniform acceleration. What is the acceleration of a body moving with uniform velocity?

    (b)   A particle moves over three quarters of a circle of radius r. What is the magnitude of its displacement?

2   Study the velocity-time graph and calculate.

(a) The acceleration from A to B

(b) The acceleration from B to C

(c) The distance covered in the region ABE

(d) The average velocity from C to D

(e) The distance covered in the region BCFE

3.   Write down the difference between Scalars and Vectors?

4   An airplane accelerates down a runway at 3.20 m/s^2 for 32.8 s until is finally lifts off the ground. Determine the distance traveled before take off.

5.   A boy on a 78.4m high cliff drops a stone. One second later, he throws another stone downwards with some speed. The two stones reach the ground simultaneously. Find the speed with which the second stone was thrown
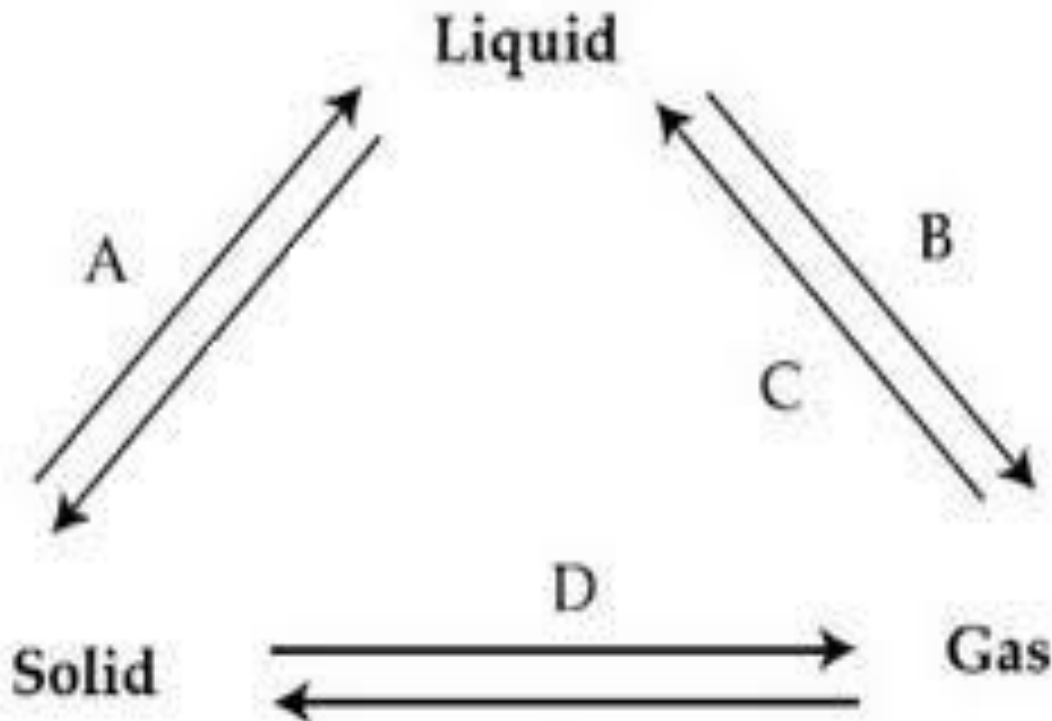
(Acceleration due to gravity=9.8 m/s^2).

SUBJECT – CHEMISTRY
ASSIGNMENT – 1

1. A sample of water under study was found to boil at 102^0C at normal temperature and pressure. Is the water pure? Will it freeze at 0^0C? Comment.

2. What is the difference between a gas and a vapour? Which of the following substances in the gaseous state should be called a vapour: Oxygen, chlorine, iodine, flourine

3. Ordinary water boils at 100^0C. Can it be made to boil at 95^0C or 105^0C?

4. I extremely cold weather, a family burnt coal in the room during night keeping doors and windows closed. After sometime, they felt suffocated. They immediately opened the doors and the windows and got relief. Explain what did actually happen?

5. List two properties that liquids have in common with solids and list two properties that liquids have in common with gases.

6. A punctured tyre becomes flat more easily in summer than in winter? Explain.

7. Why does ice at 0^0C appear colder than water at same temperature?

8. Enumerate the changes that take place inside the matter during the change of matter.

9. What is the temperature at kelvin scale at which all molecular motion virtually stops?

10. Is dry ice same as ordinary ice?

ASSIGNMENT – 2

1. Identify the processes labeled as A, B, C and D in the following schematic diagram

2. A sample of water was heated from 25^0C to 35^0C. How much was the rise in temperature on Kelvin scale?

3. Both sand and water take the shape of the vessel in which they are placed, yet sand is called a solid. Explain.

4. A substance has a definite volume but no definite shape? State whether this substance is a solid, a liquid or a gas.

5. You are provided with a mixture of naphthalene and sodium chloride by your teacher. Suggest an activity to separate them with a well labeled diagram.

6. Give one example each of diffusion of (a) a solid into a liquid (b) a liquid into another liquid (c) a gas into another gas

7. For any substance, why does the temperature remain constant during the change of state?

SUBJECT – BIOLOGY
ASSIGNMENT – 1

1) We eat food composed of all the nutrients like carbohydrates, proteins, fats, vitamins, minerals and water. After digestion, these are absorbed in the form of glucose, aminoacids, fatty acids, glycerol etc. What mechanisms are involved in absorption of digested food and water?

2) How does amoeba engulfs its food?

3). A person takes concentrated solution of salt, after sometime, he starts vomiting. What is the phenomenon responsible for such situation? Explain.

4) In brief state what happens when
   (a) Dry apricots are left for sometime in pure water and later transferred to sugar solution?
   (b) a Red Blood Cell is kept in concentrated saline solution?
   (c) the Plasma-membrane of a cell breaks down?
   (d) rheo leaves are boiled in water first and then a drop of sugar syrup is put on it?
   (e) golgi apparatus is removed from the cell.

5) Draw a neat labeled diagram of eukaryotic cell.

ASSIGNMENT – 2

1. Name the organelle that is known as 'factory of proteins'.

2. What is chromatin material? How does it change before cell division?

3. You took a tomato and put it in a highly concentrated solution for 2 hours. Your little brother looked at it and stated 'the fat tomato is so thin now, What a magic '?

    I) Define the phenomenon that has taken place?

    II) How does a cell wall help a plant to withstand hypotonic external medium without bursting?

4. List two statements by which lysosomes are aptly called the suicidal bags of cell? What kind of enzymes are present in lysosomes?

5. Differentiate between nuclear region of a animal cell and bacterial cell?

6. What kind of plastids are common in :

    I) Roots of a plant

    II) Leaves

    III) Flowers and fruits

7. How do autotrophic bacteria synthesise their food since they don't have chloroplast?

8. State one feature that is similar and one feature that is dissimilar with respect to mitochondria and plastids.

9. What is plasma membrane made up of?

10. What would happen to the cell if there is no Golgi body?

11. What is the full form of ATP? Write the use of the energy released by this compound for the cell.

12. Draw a large diagram of an animal cell as seen through an electron microscope. Label the parts that carry on the function of Respiration, secretion, protein synthesis, transport of material.

13. Why do plant cell have bigger sized vacuoles as compared to animal cells?

14. :What is the significance of pores present on nuclear membrane?

15."Diffusion plays an important role in gaseous exchange between the cells as well as the cells and its external environment". Explain How?

16) State one feature that is similar and one feature that is dissimilar with respect to mitochondria and plastids

17) What is lacking in virus which makes which makes it dependent on living cell to multiply?

18) A solution of 3% glucose and a solution of 8% glucose are kept in a trough separated by a semi permeable membrane. What will you observe after 1 hour?

19) How are genes and DNA related to each other?

20) Differentiate between mitosis and meiosis.

Chapter-1 The French Revolution

1. Who wrote 'The Spirit of Laws' ? What did the author propose in the book ?   **(1)**

2. Who were the members of the Jacobin club? Name the leader of this club.   (1)

3. What was the Estates General ?   (1)

4. Explain the following political symbols   **(3)**

    i.   Snake biting it's tail

    ii.   Red Phrygian cap

    iii.   Broken chain

5. Draw up a list of democratic rights we enjoy today whose origins could be traced to the French Revolution **(HOTS)**   **(3)**

6. Describe the triangular slave trade that was carried on in the 18th and the 19th centuries.   **(3)**

7. How did the Revolution affect the everyday life of the people of France **(3) (HOTS)**

8. Describe the severe equality measures introduced by Maximillian Robespierre. Why is the period from 1793-1794 called as the 'Reign of Terror' ?   **(5)**

Chapter -2 What is Democracy ? Why Democracy ?

9. What is the name of the Chinese parliament ?**(1)**

10. 'Democracy enhances the dignity of its citizens'. How ? **(1)**

11. How can you say that Mexico till 2000 was not a democratic country ? (3)

12. How is a democratic government better than other forms of government ? Explain giving atleast five arguments in favour of democracy (5) **(HOTS)**

ASSIGNMENT – 2

Ch –1 FRENCH REVOLUTION

Q1. In which battle was Napoleon defeated and when ? (1)
Q2. What was guillotine? (1)
Q3. Who was the Leader of the Jacobin club? (1)
Q4. Name the national anthem of France. (1)
Q5. Mention the Role of philosophers in the French Revolution. [3]
Q6. Discuss any three severe equality measures introduced in France during the Reign of Terror [3]
Q7. Describe the circumstances/ events which led to the Tennis Court Oath. [3]
Q8. What do you understand by the term subsistence crisis ? What led to subsistence crisis in France. [1+2]
Q9. What were the main causes of the French Revolution. [5]
Q10. How did the French Revolution affect the everyday life of the people in France? [5]

CIVICS

Ch2 What is Democracy ? Why Democracy?
Q1. State one Asian country where women do not have right to vote. [1]
Q2. During which period did China record its worst famines in the World's history?[1]
Q3. State the drawback in the electoral system of Fiji? (1)
Q4. Mention three instances of denial of equal right to vote. (3)
Q5. What is representative democracy? Why it is necessary? (1+2)
Q6. Explain the main features of non democratic government with example from Pakistan and China. (3)
Q7. Describe broader meaning of democracy (3)
Q8. Give five arguments against democracy. (5)
Q9. Give five arguments in favour of democracy. (5)

SUB : GEOGARPHY & ECONOMICS

Assignment – 1

Q1.   Why is the difference between the duration of Day and Night hardly felt at Kanyakumari but not so in Kashmir ?

Q2.   In which Hemisphere does India lie ?

Q3.   What is the latitudinal and longitudinal extent of the mainland of India ?

Q4.   "India s " land Routes have been important since ancient times . " Explain .

Q5.   Why do we need a standard Meridian for India?

Q6.   India occupies an important strategic position in South Asia . Discuss .

Q7.   Distinguish between

    a. Converging and Diverging Tectonic plates

    b. Bhangar and Khadar

    c. Western Ghats   and Eastern Ghats

Q8.   Describe how the Himalayas were formed .

Q9.   Differentiate between Himalayas and Peninsular Plateau .

Q10.   Explain the theory of plate Tectonics .

Q11.   Mention two   feature of the himadri .

Q12.   What is the main production activity in Palampur Village ?

Q13.   What is the Aim of production ?

Q14.   What do you mean by Physical capital ?

Q15.   What do you mean by fixed capital ?

Q16.   What does Factors of Productions mean ? What are the four requirements for the production of goods and services ?

Q17.   Locate the following and label on the Map of India :

    i.   The Island groups of India lying in the Arabian sea and the Bay of Bengal

    ii.   The countries constituting Indian subcontinent

    iii.   The States through which the tropic of cancer passes .

    iv.   The Northern most latitude in Degrees .

    v.   The eastern and the western most Longitudes in degrees .

    vi.   The place situated on the three seas

    vii.   The strait separating Sri Lanka from India

Assignment – 2

CHAPTER-INDIA-SIZE AND LOCATION

Q1.   The Central location of India at the head of the Indian Ocean is considered to be of great significance. Why?

Q2.   How is India divided into almost two equal parts?

Q3.   Why 82° 30' E has been selected as the standard meridian of India?

Q4.   Why the difference between the duration of day and night hardly felt at Kanyakumari but not so in Kashmir?

Q5.   Describe the importance of location of India in the world?

Q6.   State the longitudinal and latitudinal extent of India.

Q7.   On the map of India, Mark the following:
- Tropic of Cancer
- Latitudinal and Longitudinal extent of India
- The Palk Strait
- Standard Meridian of India

CHAPTER- PHYSICAL FEATURES OF INDIA

Q1.   Differentiate between:
- Bhangar and Khadar
- Bhabar and Terai
- Western Coastal Plains and Eastern Coastal Plains
- Eastern Ghats and Western Ghats

Q2.   Which are the major physiographic divisions of India? Contrast the relief of the Himalayan region and the Peninsular Plateau.

Q3.   Give an account of the Great Peninsular Plateau of India .

Q4   How does physiography of India complement each other?

Q5   Write a short note on :
- Central Highlands
- Deccan Plateau
- Group of Islands of India

Q6.   Explain the important characteristics of the Himalayan mountains.

Q7.   What are the two features of the Puravanchal?

Q8.   On an outline map of India, Mark the following:
- Chota Nagpur Plateau
- Coromandel Coast
- Kannad Plain
- Shiwaliks
- Aravallis
- Garo, Khasi and Jaintia hills

SESSION	:	2019-2020
PROJECT WORK	:	SUMMER BREAK HOLIDAY HOMEWORK
CLASS	:	IX
SUBJECT	:	Indian music vocal
ACTIVITY	:	Individual activity

Topic	Indian music
Content Coverage	Traditional instrument used in Indian classical music. e.g; Tanpura, tabla, sarangi, sitar, etc.
Learning Objectives	Students will be able to know the Indian music and culture
Procedure	• Used A4 size pastel sheet • Students should write about any two traditional instruments. • Paste the picture of two traditional instruments you have chosen. • Write a brief about the instrument (Origin, Material used, singer who use it etc.)
Criteria / Rubrics for assessment	Presentation – 4 marks , Content – 3 marks , punctuality/relevance – 3 marks
Values imparted through the Activities	Students will know about the varios indian instruments and their importance.
Follow up	Constructive follow up will be done after the assessment.. if needed individually in the class or in general.

SESSION	:	2019-2020
PROJECT WORK	:	SUMMER BREAK HOLIDAY HOMEWORK
CLASS	:	IX
SUBJECT	:	INSTRUMENTAL MUSIC
ACTIVITY	:	Individual activity

Topic	Instrumental music
Content Coverage	Wind chime bell of seven different sound.
Learning Objectives	Students will learn about the sound and music and a tone of vibration.
Procedure	- Design a wind chime of seven strings. - Briefly write the procedure of making wind chime on A4 size sheet. - You can use materials like, Bangles, stone, plastic pipe etc.
Criteria / Rubrics for assessment	Presentation – 3 marks, Creativity – 4 marks , Material used– 3 marks
Values imparted through the Activities	Students will be able to understand the value of sound music because music refresh our mind.
Follow up	Constructive follow up will be done after the assessment. If needed individually in the class or in general.

SESSION	:	2019-2020
PROJECT WORK	:	SUMMER BREAK HOLIDAY HOMEWORK
CLASS	:	IX
SUBJECT	:	Western music vocal
ACTIVITY	:	Individual activity

Topic **Content Coverage**	Western music • Different genra of western music • Classic Rock music, Ballade music, Blues and jazz music.
Learning Objectives	Students will know the differences of musical genra and importance of music. And can improves their interests towards musical knowledge..
Procedure	1. Use A4 size pastel sheet, 2. Write one song from each genra a> Rock, b> Ballade,c>Blues. & d> jazz... And also write the song composer's or Band name … 3. ..Write why music is important in life.? 4. Students can attach the picture of the instruments, singers or Band members
Criteria / Rubrics for assessment	Presentation – 3 marks , Content – 4 marks, Relevance / Punctuality – 3 marks
Values imparted through the Activities	Students will be able to understand the value of music and can improve their interest and singing skills.
Follow up	Constructive follow up will be done after the assessment. If needed individually in the class or in general.

SESSION	:	2019-2020
PROJECT WORK	:	SUMMER BREAK HOLIDAY HOMEWORK
CLASS	:	IX
SUBJECT	:	Indian music vocal
ACTIVITY	:	Individual activity

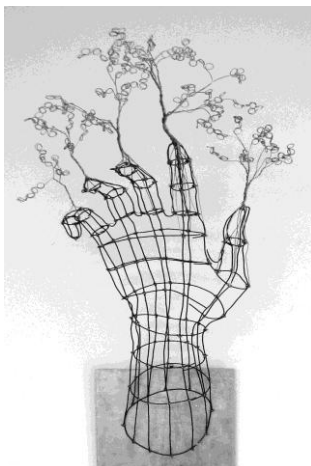|	
Topic **Content Coverage**	Indian music Traditional instrument used in Indian classical music. e.g; Tanpura, tabla, sarangi, sitar, etc.
Learning Objectives	Students will be able to know the Indian music and culture
Procedure	- Used A4 size pastel sheet - Students should write about any two traditional instruments. - Paste the picture of two traditional instruments you have chosen. - Write a brief about the instrument (Origin, Material used, singer who use it etc.)
Criteria / Rubrics for assessment	Presentation – 4 marks , Content – 3 marks , punctuality/relevance – 3 marks
Values imparted through the Activities	Students will know about the varios indian instruments and their importance.
Follow up	Constructive follow up will be done after the assessmen. If needed individually in the class or in general.

SESSION	:	**2019-2020**
PROJECT WORK	:	**SUMMER BREAK HOLIDAY HOMEWORK**
CLASS	:	**IX**
SUBJECT	:	**PAINTING**
ACTIVITY	:	**Wall Art Designing**
DATE OF SUBMISSION	:	**5th July2019**

Topic **Themes**	"Cultural Chauraha" • Traditional art of India • Vivid objects collage • Typography • Songs of the world
Nature of task **Learning Objectives**	Pulling out the traditional yet modern approach of our students in the form of painting Getting to learn about the different art cultures and their aesthetic attributes.
Procedure **Criteria / Rubrics for assessment**	Paint any one theme from the following on an **A2 size MDF board** of thickness (not less than 2 mm). 　　　Creativity and Presentation (5) 　　　Relevance to the theme　　　(3) 　　　Materials/Media used　　　(2)
Values imparted through the Activities	Students to gage the best knowledge about the roots they come from in context of their culture.
Follow up	Making students regularly trained in Art.

SESSION	:	2019-2020
PROJECT WORK	:	SUMMER BREAK HOLIDAY HOMEWORK
CLASS	:	IX
SUBJECT	:	SCULPTURE
ACTIVITY	:	WIRE SCULPTURE
DATE OF SUBMISSION	:	5th July2019

Topic	"Getting innovative with Wire"
Themes	- Music & Dance - Art & Culture - Animals and Birds - Daily Life Objects(machines, utensils, decorative arts etc.)
Nature of task	Children will get to come up with their creative minds and execute their craft.
Learning Objectives	Getting to learn about the different art cultures and their aesthetic attributes.
Procedure	Create a wire sculpture of minimum 10 inches in **a 2D wall design or a 3D structure**. The base mainly to have wire along with suitable materials like spoons, sticks , cardboard , foil , plastics etc.
Criteria / Rubrics for assessment	Creativity and Presentation (5) Relevance to the theme (3) Materials/Media used (2)
Values imparted through the Activities	Use of Medium, exploring the medium and utilizing it to the fullest.
Follow up	Making students regularly trained in Art.

SESSION	:	2019-20
CLASS	:	IX
SUBJECT	:	Band
ACTIVITY	:	Individual

Topic	Explore about different bands used by different countries
Learning Objectives	Children will be learning about different bands used by different countries
Duration	summer vacation holiday homework
Execution of task / Procedure	- Use A4 size sheet. - Write a brief about the different bands used in different regions of world like brass band, flute band. etc - Paste some pictures of different bands used in different regions.
Criteria / Rubrics for assessment	Content (originality) **4 marks** Presentation **3 marks** Creativity **3 marks**
Values	Children will get to know about vocal and instrumental culture of different countries
Follow up	Teacher will help the child for further informations