



SUMMER HOLIDAY ASSIGNMENT

GRADE – 10(CAIE)

SUBJECT - ENGLISH

1) Observe in the interest of humanity

Do you like to people watch? There are so many fun and interesting things you can learn from simply watching the people around you, and there are plenty of places for good people-watching: a restaurant, a park, a mall, public transportation, sporting event.

I'm sure you can think of a dozen more. And there are plenty of ways to tie language use to people watching.

- Write descriptions of the people you see.
- Listen to dialogue and note unfamiliar vocabulary you hear.
- Construct a story plot and create a comic strip of your observation.
- You may put your writing skills to work by writing out a scene starring someone you observed. Practice speaking about your muse as you would be presenting your inference and observation in the class to tell your classmate about a person you saw and reason why you observed him/her.

2) Put on some headphones

Music can do anything from relax us to invigorate us to help us fall in love. Who doesn't love to listen to music?

Music is good for English learners, too, since it stresses many aspects of language that can otherwise be hard to isolate.

Choose some English songs to listen to for homework and then do the following:

- Practice the lyrics to learn intonation and rhythm.
- Note slang and cultural references in the songs.

- Draw a picture/ story board of how the music makes you feel, when school reopens you have to share your work with the class and explain why you created what you did.
- Share your favorite lyrics and what a particular song means to you.

3) Engage yourself in constructive activities and put yourself into meaningful reading.

List the books you read during the vacation and prepare a pedlet presentation with the following heading:

Title of the book

Illustrations

Story plot

Genre

Author's name

Your favourite character and his/her/ their character sketch

Few moral values and ethics you could learn from the story.

4) Observe measures to save water, electricity, and food at home and avoid its wastage.

Prepare a Timeline showcasing your efforts to reduce the wastage and recycle the resources. Write a short paragraph and prepare an instruction chart for the same.

Revise all the work done in class.

विषय - हिंदी

1. आज की युवा पीढ़ी उच्च शिक्षा प्राप्त कर विदेशों में नौकरी पाने के लिए तत्पर है | इस विषय के पक्ष अथवा विपक्ष में अपने तर्क संगत विचार प्रस्तुत कीजिए | (शब्द सीमा - 200 शब्द)

2. महादेवी वर्मा द्वारा लिखित संस्मरण 'गिल्लू' पढ़कर लगभग 150 शब्दों में उसके विषय में अपने विचार व्यक्त कीजिए कि आपको वह कैसा लगा और क्यों ? यह कार्य अपनी आवाज़ में रिकॉर्ड करके ऑडियो के रूप में प्रस्तुत करें |

3. 'जब मेरे द्वारा लगाए गए पौधे में पहला फूल खिला' इस विषय पर 120 शब्दों में अनुच्छेद लिखिए |

संकेत बिंदु - * पौधा कब लगाया था

* पौधा ज़मीन में लगाया या गमले में

* फूल का रंग

* अनुभव

4. रविन्द्रनाथ टैगोर द्वारा रचित कहानी 'काबुलीवाला' को पढ़कर 200 शब्दों में इसकी समीक्षा लिखो |

5. 'सब दिन रहत न एक सामान' इस विषय पर 200 शब्दों में एक लेख लिखिए |

निर्देश - लेख लिखते समय लोकोक्ति/मुहावरों का प्रयोग अवश्य करें |

संकेत बिंदु: * परमात्मा का खेल

* कभी सुख कभी दुःख जीवन की सुन्दरता बढ़ते हैं |

* न दुःख में निराश हों, न सुख में इतराएँ

6. एक से सौ तक की संख्याओं को शब्दों में लिखो और याद करो |

SUBJECT - FRENCH

50 questions de conversation sur le divertissement

Ceci est une liste de plus de 50 questions de conversation sur le divertissement

Films

1. Quel est votre film préféré?
2. Avec qui aimez-vous être en regardant un film?
3. Quel est votre acteur ou actrice préféré? Soutenez votre réponse
4. Quelle est votre opinion sur les films romantiques?
5. Pouvez-vous me dire le nom de certains films que vous avez regardés plus de deux fois?
6. Quel est votre genre de film préféré?
7. À quelle fréquence allez-vous au cinéma ou au théâtre?
8. Quel est le meilleur film que vous n'avez jamais vu? Pourquoi l'avez-vous aimé?
9. Quel est le pire film que vous n'avez jamais vu? Pourquoi ne l'avez-vous pas aimé?
10. Aimez-vous les films indépendants? Quels films indépendants avez-vous regardés?

Émissions de télévision et dessins animés

1. Quels ont été quelques - uns des émissions de télévision ou de dessins animés que vous regardiez quand vous étiez un enfant?
2. Qui ne vous aimez être avec tout en regardant la télévision?
3. Quel est votre personnage préféré dans une émission de télévision ?
4. Regardez-vous des feuilletons? Quelqu'un dans votre famille le fait-il? Si oui, qui?
5. Que pensez-vous des chaînes sportives?
6. Que pensez-vous des chaînes d'information?
7. Qu'as-tu regardé à la télé hier?
8. Souhaitez-vous regarder la télévision moins souvent? Pourquoi pas?
9. Les émissions de télévision et les films ont-ils rendu les gens stupides? Pourquoi penses-tu ça?
10. Quels sont les avantages de regarder la télévision?
11. Quels sont les inconvénients de regarder la télévision?
12. Pourriez-vous vivre sans télévision pendant une semaine?
13. Que pensez-vous des émissions de télé-réalité?

Questions relatives au divertissement: jeux vidéo

1. Jouez-vous à des jeux vidéo? Si oui, à quels jeux avez-vous joué?
2. Quel jeu vidéo recommanderiez-vous à un nouveau joueur?
3. Souhaitez-vous participer à un tournoi de jeux vidéo?
4. Avez-vous une console de jeu vidéo préférée?
5. À quels jeux jouiez-vous quand vous étiez enfant?

Des sports

1. Êtes-vous fan de sport? De quel sport aimeriez-vous faire partie?
2. À quel sport n'aimerais-tu pas participer?
3. Sports d'équipe ou sports individuels? Soutenez votre réponse
4. sports d'intérieur ou sports de plein air? Soutenezvotre réponse
5. À quel événement sportif aimeriez-vous assister?
6. Voulez-vous essayer un sport extrême? Laquelle?

La musique

1. Quel est ton album préféré?
2. Qui est votre chanteur préféré?
3. Quelle est votre bande originale préférée?
4. Dites-moi votre top cinq des chansons de tous les temps
5. Avez-vous déjà été à un concert? si oui, que pouvez-vous m'en dire?
6. Aimes-tudanser?
7. Aimez-vous passer beaucoup de temps à écouter des chansons sur Youtube ?

Célébrités

1. Aimeriez-vous vivre en paparazzi?
2. Si vous étiez Paparazzi, qui suivriez- vous chaque jour?
3. Si vous aviez l'occasion d'épouser une célébrité, qui épouseriez-vous?

Livres électroniques

1. Quels sont les bons livres que vous avez lus?
2. Quel est le meilleur livre que vous n'avez jamais lu?
3. Quels livres avez-vous hâte de lire à l'avenir?
4. Quels sont les écrivains célèbres de votre pays?

Questions générales

1. Qu'est-ce qui vous divertit?
2. Si vous restiez sur une île déserte pendant un an, qu'apporteriez-vous avec vous pour vous divertir?
3. À quelle fréquence allez-vous aux fêtes?

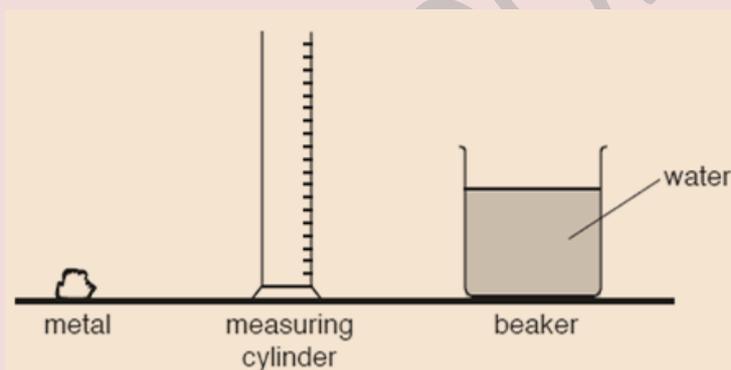
4. À quelle fréquence lisez-vous des bandes dessinées?
5. Que pouvez-vous faire sans dépenser un centime?

6. Quelles sont tes vacances préférées? Pourquoi?
7. Quand écoutez-vous habituellement la radio?
8. Que faites-vous habituellement le week-end?
9. Qu'as-tu fait le week-end dernier?
10. Quelle est la personne la plus divertissante que vous connaissez? Êtes-vous une personne divertissante?

SUBJECT – PHYSICS

Q.1.

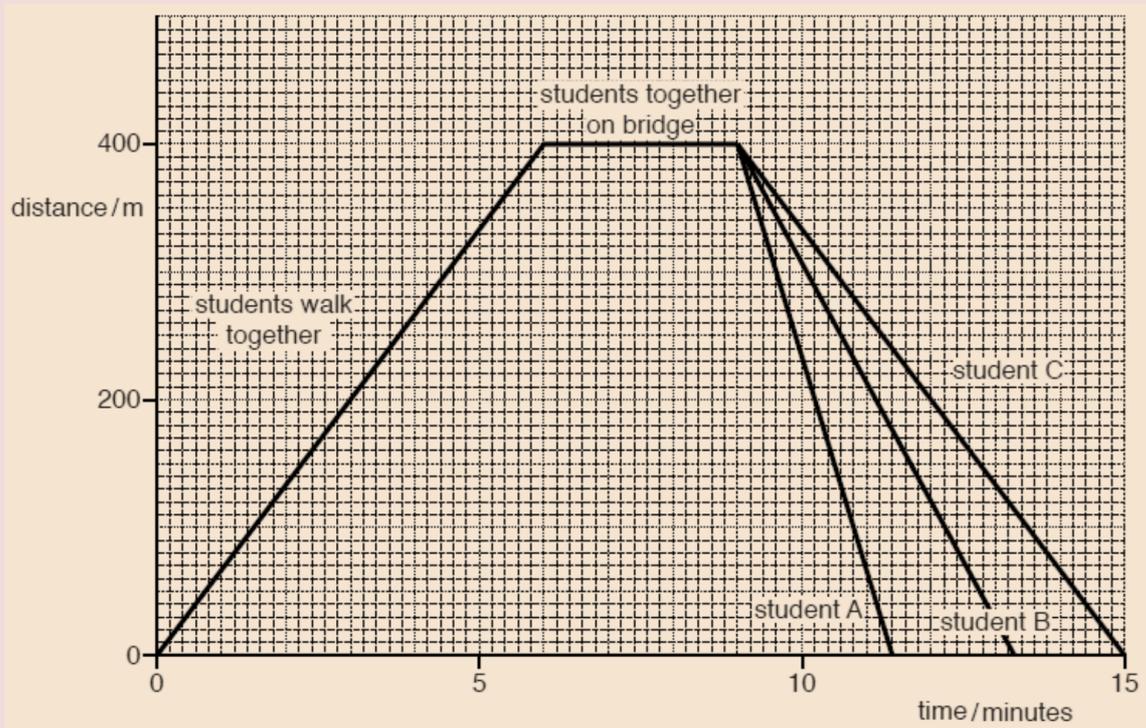
- a) A student has a piece of metal that has an irregular shape. The weight of the metal is 3.0 N. Calculate the mass of the metal.
- b) Fig. below shows the piece of metal, a measuring cylinder and a beaker containing water.



- i) Describe how to determine the volume of the metal, using the equipment in above fig.
- ii) Explain why the procedure in (b) (i) is not suitable for finding the volume of a piece of low-density wood that is of similar shape and size to the piece of metal in (a).
- iii) The mass of another piece of metal is 405 g and its volume is 150 cm³. Calculate the density of the metal. State the unit.

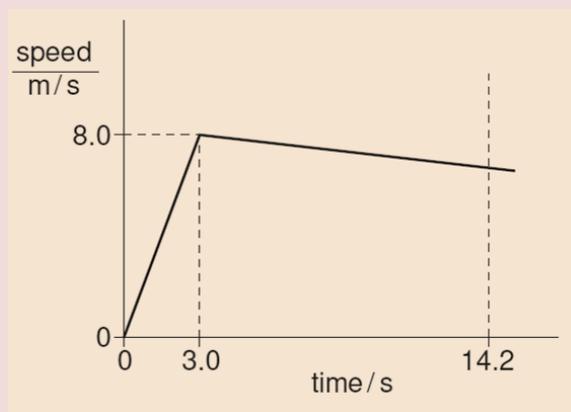
Q.2. Three students walk together from school to a bridge. The students stand together on the bridge for three minutes and then return separately to school.

The distance-time graphs for student A, student B and student C are shown in Fig. below.



- a)
- i) Determine the distance from the school to the bridge.
 - ii) Calculate the average speed of the students when they are walking to the bridge. Give your answer in m/s.
- b) The students return to school at different speeds. One student walks slowly, one student walks quickly and the other student runs.
- State which student runs. Explain how this is shown by the graph.

Q.3. A young athlete has a mass of 42 kg. On a day when there is no wind, she runs a 100 m race in 14.2 s. A sketch graph (not to scale) showing her speed during the race is given in Fig. below



(a) Calculate:

(i) The acceleration of the athlete during the first 3.0 s of the race,

(ii) The accelerating force on the athlete during the first 3.0 s of the race,

(iii) The speed with which she crosses the finishing line.

Q.4. A student investigates the stretching of elastic bands.

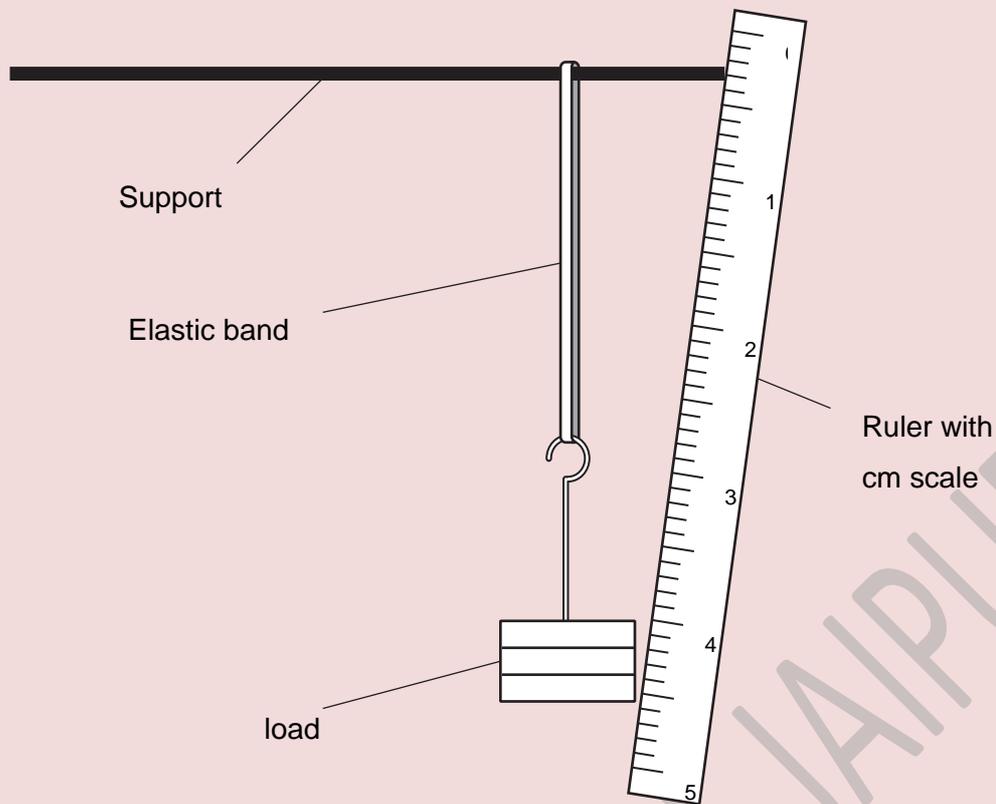
Table 2.1 shows some of his results for elastic band A.

load attached / N	elastic band A	
	length / cm	extension / cm
0	10.2	0.0
1	10.9	0.7
2	11.5	1.3
3	12.3	2.1
4	13.0	2.8
5	13.7	
6	14.5	

a) Complete Table 2.1 by calculating the missing extensions.

b) The student repeats his experiment using elastic band B. Elastic band B is twice as long as elastic band A. It has the same thickness and is made of the same material.

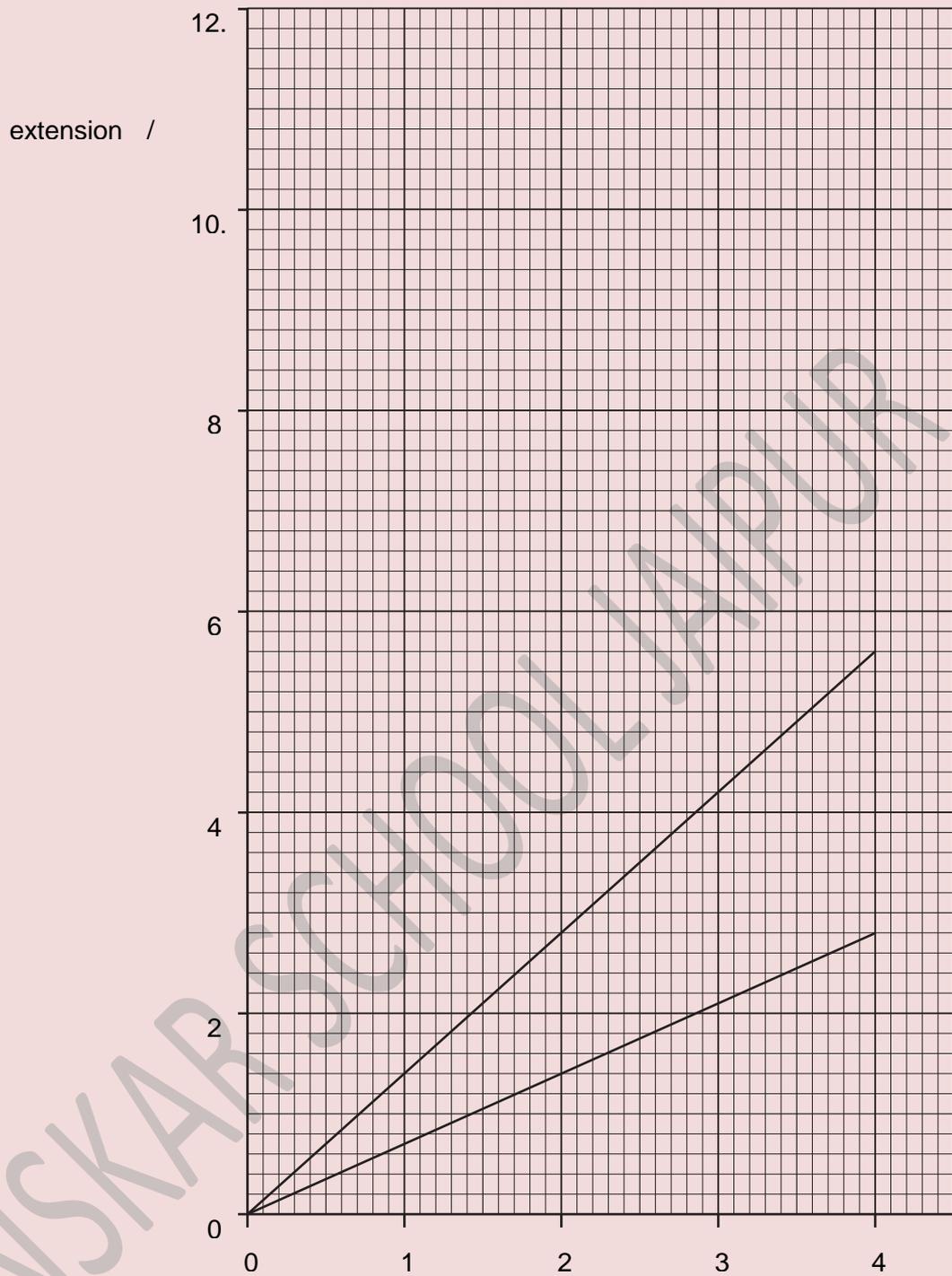
Fig. below shows how he uses the apparatus.



Describe two changes the student could make to improve the accuracy of his measurements.

- c) The student draws a graph of extension against load for each elastic band.

The lines of best fit for elastic bands A and B are shown in Fig. 2.2.

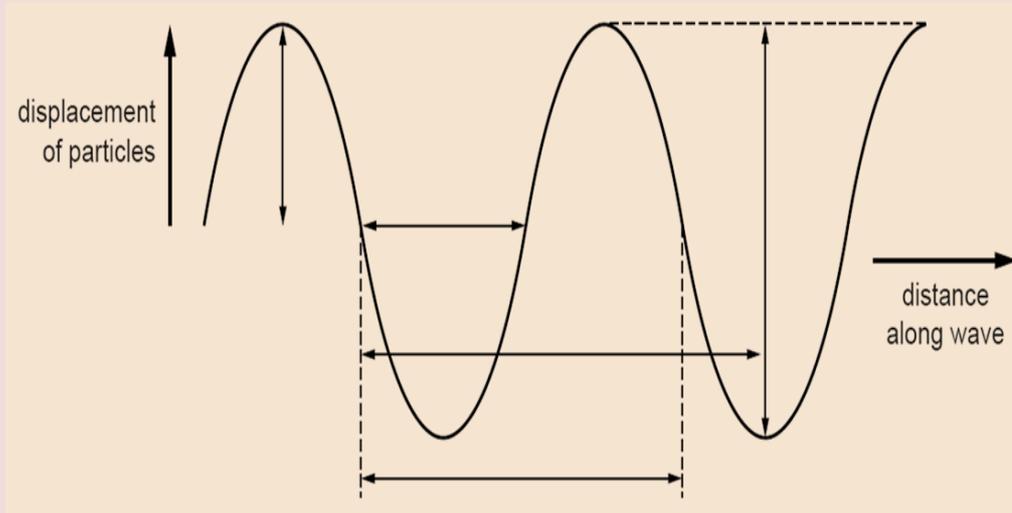


- i) Use information from Table 2.1 to label each of the graph lines. Label the lines band A and band B. Explain how you decided on your answer.
- ii) The student repeats his experiment using elastic band C, which is three times as long as elastic band A. It has the same thickness and is made of the same material.

On Fig. 2.2, draw a line to suggest how extension would vary with load for elastic band C. Label the line band C.

Q.5.

a) Fig. below represents the waveform of a sound wave. The wave is travelling at constant speed.



(i) On fig. above, 1

1. Label with the letter X the marked distance corresponding to the amplitude of the wave,
2. Label with the letter Y the marked distance corresponding to the wavelength of the wave.

(ii) State what happens to the amplitude and the wavelength of the wave if

1. The loudness of the sound is increased at constant pitch,

Amplitude.....

Wavelength.....

2. The pitch of the sound is increased at constant loudness.

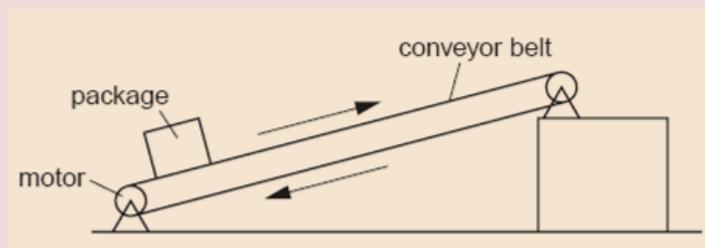
Amplitude.....

Wavelength.....

b) A ship uses pulses of sound to measure the depth of the sea beneath the ship. A sound pulse is transmitted into the sea and the echo from the seabed is received after 54 ms. The speed of sound in seawater is 1500 m / s. Calculate the depth of the sea beneath the ship.

Depth =.....

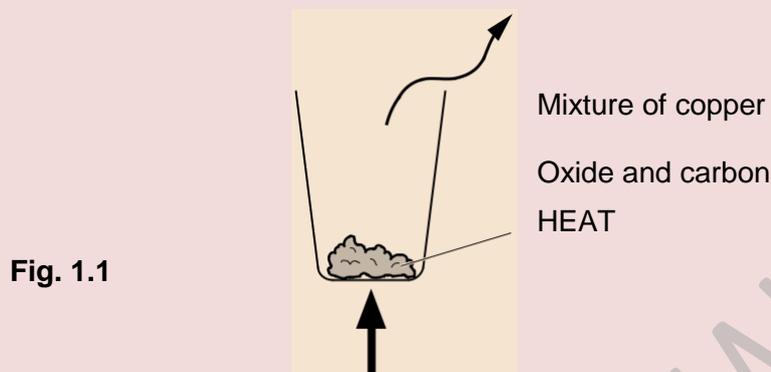
Q.6. Fig. below shows a conveyor belt transporting a package to a raised platform. The belt is driven by a motor.



- The mass of the package is 36 kg. Calculate the increase in the gravitational potential energy (g.p.e.) of the package when it is raised through a vertical height of 2.4 m.
- The package is raised through the vertical height of 2.4 m in 4.4 s. Calculate the power needed to raise the package.
- The electrical power supplied to the motor is much greater than the answer to (b). Explain how the principle of conservation of energy applies to this system.
- Assume that the power available to raise packages is constant. A package of mass greater than 36 kg is raised through the same height. Suggest and explain the effect of this increase in mass on the operation of the conveyor belt.

SUBJECT- BIO AND CHEMISTRY

1. (a) Copper is extracted from copper oxide by heating with carbon, as shown in Fig. 1.1. carbon dioxide gas



Carbon dioxide is produced in this process.

- (i) Complete the word equation for this process.

copper oxide + $\xrightarrow{\quad}$ +

- (ii) Use words from the list to describe substances involved in this process. Each word may be used once, more than once or not at all.

atoms

compound

covalent

element

ionic

ions

solution

Copper oxide is acontaining oppositely charged..... .

In carbon dioxide, each molecule contains three..... chemically joined bybonds.

(iii) State whether the change from copper oxide to copper during this process is oxidation or reduction.

Explain your answer.

Change.

Explanation

(b) Aluminum is extracted from the ore bauxite.

(i) State the method of extraction of aluminum from bauxite.

(ii) An atom of aluminum is represented by the symbol shown.



Deduce the number of electrons and the number of neutrons in this atom.

Electrons.....

Neutrons.....

2. (a) Fig. 2.1 shows diagrams of a plant cell before and after the cell is immersed in concentrated sugar solution.

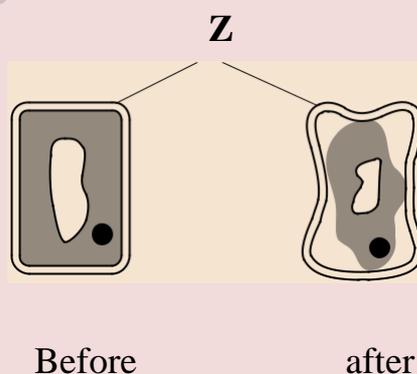


Fig. 2.1

- (i) Identify part **Z** shown in Fig. 2.1.
- (ii) Describe the effect of immersing the cell in concentrated sugar solution

Fig. 2.2 is a drawing of a cross-section of a plant root.

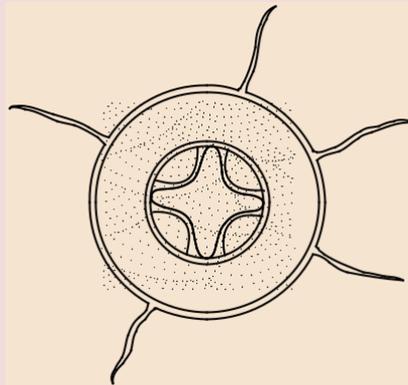


Fig. 2.2

- (i) On Fig. 2.2, use a label line and the letter **X** to show the position of the xylem.
- (ii) State the function of root hair cells.
- (iii) Water moves through xylem vessels to the leaves due to transpiration.

State the process by which water in the leaves is lost:

From the surface of the mesophyll cells

.....

Through the stomata.

.....

- (c) Water is used in photosynthesis.

Photosynthesis is the process by which plants manufacture carbohydrates from raw materials using energy from light.

(i) State the name of the structures inside plant cells where photosynthesis takes place.

(ii) State the name of the gas produced in photosynthesis.

3. Air is a mixture of different gases.

a. Name the gas that makes up 78% of clean air.

(ii) Name the gas that must be present for iron to rust.

(iii) Name **one** common air pollutant and describe **one** adverse effect that is caused by this pollutant.

Pollutant

adverse effect

(iv) State the formulae of **two** greenhouse gases.

(c) Describe the chemical tests to show the presence of water.

4. (a) Sodium chloride is made when aqueous sodium hydroxide is mixed with dilute hydrochloric acid.

State what happens to the pH of the mixture as the aqueous sodium hydroxide is added to the dilute hydrochloric acid.

(b) Sodium is in Group I of the Periodic Table, and chlorine is in Group VII.

(i) Describe the change in character of elements across a period in the Periodic Table from left to right.

(ii) Describe the trend in reactivity of Group I metals from lithium to potassium.

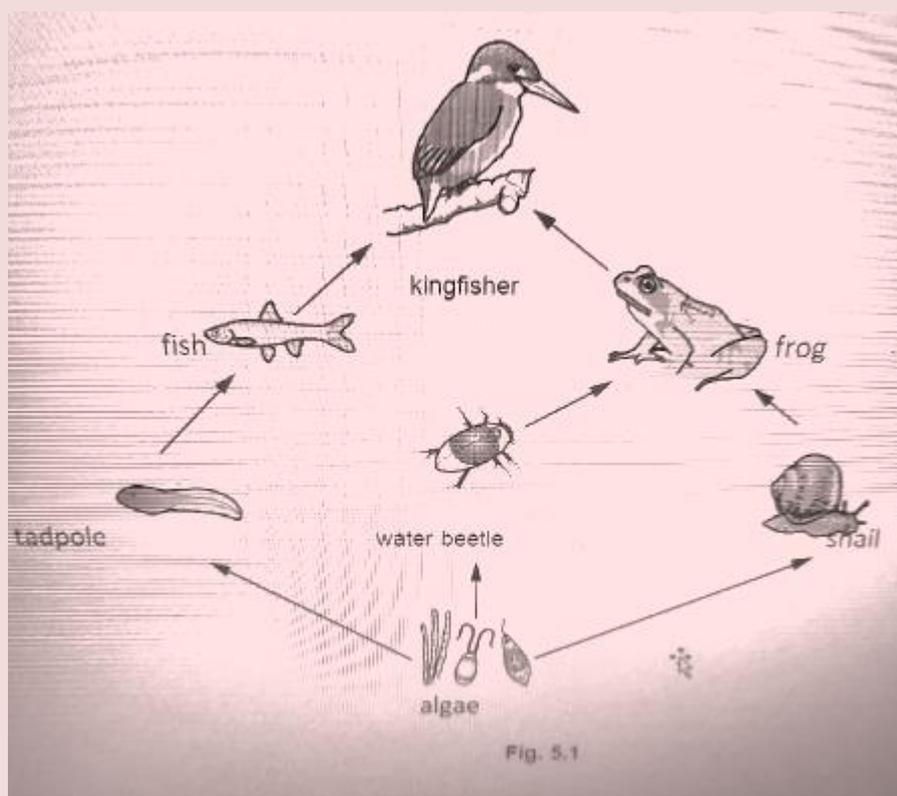
(iii) Describe the trend in physical state of Group VII elements from fluorine to iodine.

(c) Aqueous bromine reacts with alkenes.

(i) State the colour change that occurs during this reaction.

(ii) Name the reaction that produces alkenes from larger alkane molecules.

5. (a) Fig. 5.1 shows a food web for a pond habitat.



(i) Identify the producer shown in Fig. 5.1.

(ii) State the process used by producers to make glucose using energy from sunlight.

(iii) Identify **one** carnivore shown in Fig. 5.1.

(iv) Use the information in Fig. 5.1 to construct a food chain including the frog.

(b) Decomposers are also found in pond habitats. Define a *decomposer*.

(c) Decomposers are an important part of the carbon cycle. Fig. 5.2 shows a diagram of the carbon cycle.

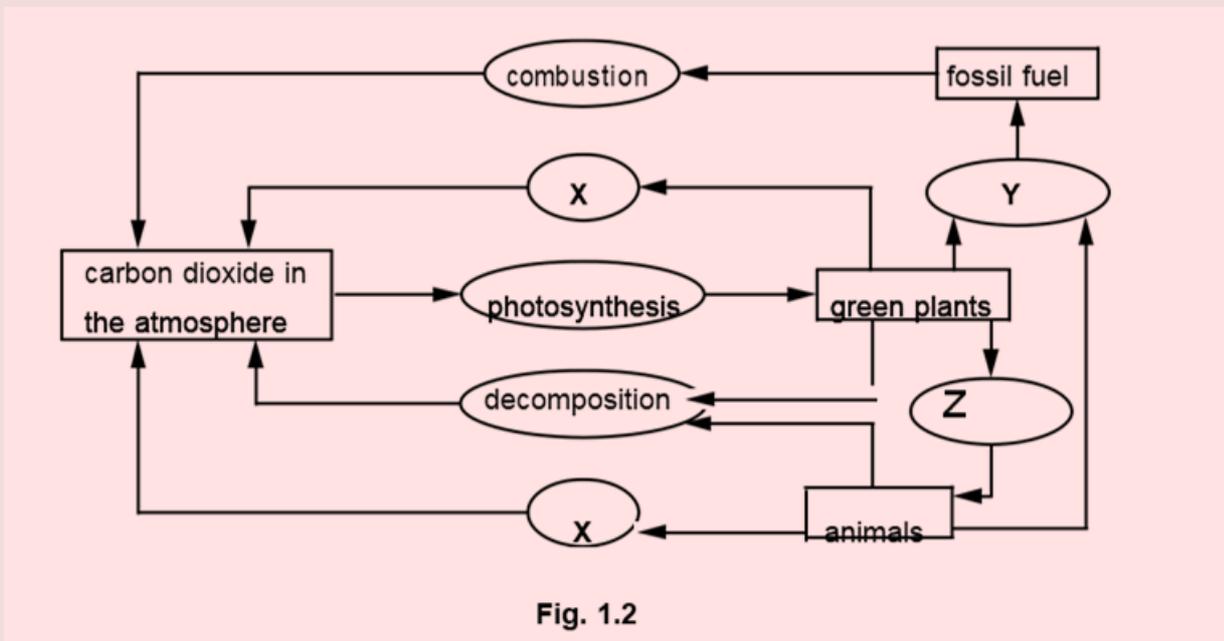


Fig. 1.2

Fig. 5.2

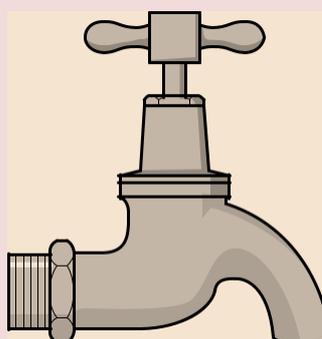
Identify processes X, Y and Z shown in Fig. 5.2.

X.....

Y.....

Z.....

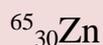
6. a) Brass is a mixture of copper and zinc. The water tap in Fig. 6.1 is made of brass.



(iii) Name the type of substance that contains a metal mixed with other elements.

(iv) Suggest **one** property of brass that makes it suitable for use as a water tap.

(c) An atom of zinc is represented by the symbol shown.



(iii) Deduce the number of neutrons in this atom of zinc.

Number of neutrons =

.....

(ii) State the number of electrons in this atom of zinc.

Number of electrons =

.....

(iii) Zinc atoms form zinc ions, Zn^{2+} .

Deduce the number of electrons in a Zn^{2+} ion.

Number of electrons =

.....

(c) Zinc reacts with dilute hydrochloric acid to form zinc chloride and hydrogen.

(i) Complete the word equation for this reaction.



(ii) Zinc chloride contains twice as many chloride ions as zinc ions.

Deduce the formula of zinc chloride.

.....

7. In an experiment, carbon electrodes are used to pass an electric current through concentrated aqueous sodium chloride, as shown in Fig. 7.1.

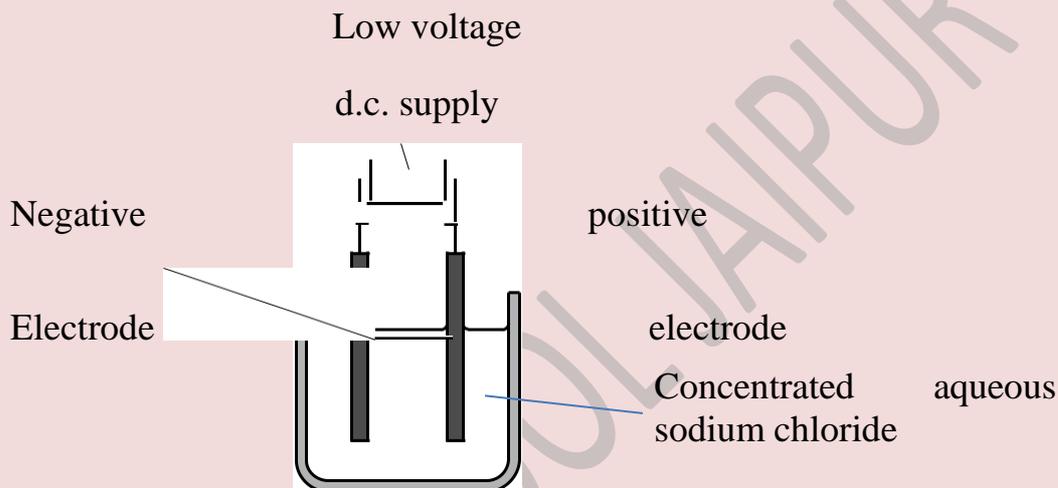


Fig. 7.1

(i) Name the process shown in Fig. 7.1.

(ii) Identify the solvent in concentrated aqueous sodium chloride.

(iii) Identify the products which form at the negative electrode and at the

Positive electrode. negative electrode product

.....

Positive electrode product

.....

(iv) Name the negative electrode and the positive electrode.

Negative electrode

.....

Positive electrode

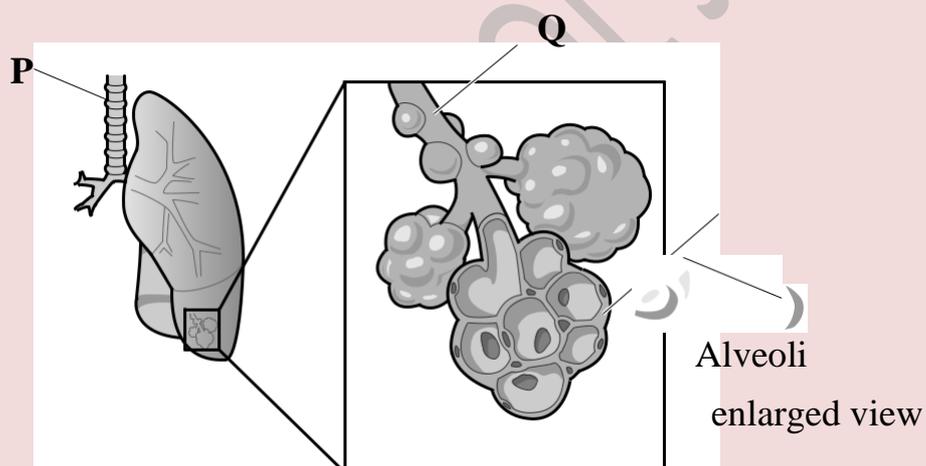
.....

(b) Some metals are extracted from their ores by heating with carbon.

(i) Identify **one** metal that is extracted from its ore by this method.

(ii) In this extraction process, oxygen is removed from the metal. State the type of chemical reaction that involves the loss of oxygen.

8. (a) Fig. 8.1 shows parts of the human gas exchange system.



Identify parts **P** and **Q** shown in Fig. 8.1.

P.....

Q.....

(iii) The lungs remove carbon dioxide from the body. Excess carbon dioxide in the body is toxic. State the characteristic of living organisms that removes toxic materials from the body.

(c) The lungs are connected to the heart by blood vessels.

(i) Name the blood vessel that transports blood from the lungs to the heart.

(ii) Name the component of the blood that produces antibodies.

9. (a) **Methane**, CH_4 , is an alkane.

(i) Methane is the main constituent of a fossil fuel. Name this fossil fuel.

(ii) Name the type of chemical bonds in a molecule of methane.

(iii) Draw dots and crosses to show **all** of the outer shell electrons in a molecule of methane, ethane and ethanol.

(b) A sample of refinery gas contains only alkane molecules.

(i) Name the process used to obtain refinery gas from petroleum.

Describe the effect, if any, of this sample of refinery gas on aqueous bromine.

- (c) Fossil fuels are used for heating.
 - (i) State the type of chemical reaction that produces a temperature increase during the combustion of fossil fuels.
 - (ii) Suggest the effect of the combustion of methane on the number of nitrogen molecules and on the number of oxygen molecules in a limited supply of air.

Nitrogen molecules

.....

Oxygen molecules

.....

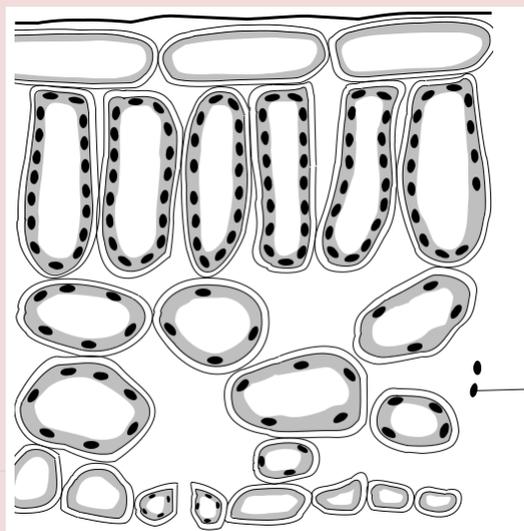
- (iii) During the combustion of fossil fuels, carbon dioxide is produced.

State the test and the positive result for carbon dioxide.

Test.....

Result.....

10. Fig. 10.1 is a cross-sectional diagram of a leaf.



Chloroplast

(a)(i) On Fig. 10.1, use a label line and the letter **P** to show a cell **in the lower epidermis** where photosynthesis takes place.

(ii) Explain your answer to (i).

(iii) Explain why the rate of transpiration increases when the temperature of the environment increases.

(b) In a garden, snails feed on the leaves of trees. Thrushes feed on the snails, and hawks eat the thrushes.

(i) Construct the food chain for these organisms.

(ii) Identify the primary consumer in this food chain. Give a reason for your answer.

Name of primary consumer.....

Reason

(iii) State **two** ways that energy is lost between the trophic levels in the food chain.

1.

2.

SUBJECT - BUSINESS STUDIES

PRACTICE OF SMALL CASE STUDIE

NOTE: SOLVE THE FOLLOWING CASES FROM WORK BOOK.

CHAPTER	No. OF CASES	PAGE NUMBER
1	5	2 TO 4
2	5	5 TO 7
3	5	8 TO 10
4	3	11 TO 13
24	3	104 TO 106
25	3	107 TO 108
26	3	109 TO 110

SUBJECT - VISUAL ARTS

AO1 Critical understanding

AO1 Critical Thinking assignment brief: Students need to develop ideas through investigations, demonstrating critical understanding of sources. Students are also required to give a brief description of their work, how they created it, the process, concept etc.

Submission format – A2 size sheets

Sources include the artefacts, images, documents and references, from our time and from other times, which increase understanding and knowledge of art and design and provide the inspiration for developing new ideas. These sources may be viewed through a great variety of contexts - historical, social, cultural, political and religious for example. Thus context may be defined as the interrelated conditions in which a work of art, craft or design exists or occurs. ‘Understanding’ is sometimes explained as the application of knowledge. It is also defined as a mental or intellectual grasp or comprehension, i.e. to see the significance or meaning of something.

Students are expected to be able to recognize that works of art, craft and design have been produced for many different purposes or intentions in different times and cultures and these, in turn, influence the meanings and interpretations we attach to them

Students also need to be aware of the intended purpose of their own work and be able to convey the meaning and purpose of the methods and approaches they use themselves. In addition, they must be able to analyze and critically evaluate the methods and approaches of others and clearly communicate their findings. It is vital that analysis and evaluation of their own work and the work of others are mutually supportive so that the one informs the other. The new 'My Creative Statement', which has to accompany each assessed unit, should help students to focus on these requirements.

To consider the methods and approaches of artists, craftspeople and designers, students will investigate historical examples and may research into contemporary sources that include practitioners who are following careers associated with the various titles of this specification.

These may be listed as follows:

Art, Craft & Design

Students can explore practitioners working in occupations associated with all the specialist titles, Fine Art, Graphic Communication, Textile Design, Three-Dimensional Design or Photography and areas of study related to these.

Fine Art

Those researching into contemporary fine art practice can explore, in addition to practicing fine artists, practitioners working in film, publishing, arts administration, museums and galleries, community arts and teaching and many other occupations associated with this title.

Graphic Communication

This can include practitioners working in such areas as general illustration, typography, corporate identity and branding consultancy, information graphics, computer-generated imagery, 2D animation, 3D modelling, design for learning, print technology, web design, television, video and computer games.

Textile Design

Students may consider practitioners working in related occupations such as a textile designer,

textilebuyer,fashiondesigner,fashionforecaster,knitweardesigner,milliner,fashionjournalist, colour consultant, theatrical costume designer, fashion illustrator, pattern-cutter and designer- maker.

Three-Dimensional Design

This covers a particularly broad range of contemporary practice, including occupations such as an industrial/product designer, theatre designer, designer for television and film, exhibition designer, packaging designer, furniture designer, interior designer, ceramicist, architectural model-maker, silversmith and jeweller.

Photography

Occupations within contemporary photographic practice include such areas as advertising, photojournalism, fashion, wildlife, industrial and technical photography, high street photography studios and film, television and video.

Critical and Contextual Studies

To research into contemporary practice, students can explore practitioners working in occupations such as curators or conservators in galleries, museums and art centres, as well as journalists, teachers and academics.

Explaining ‘analytical skills’ and ‘critical understanding’.

This Assignment Objective also requires students to demonstrate analytical and critical understanding of the work of artists, craftspeople and designers and other sources. These skills are not exclusive to art and design and it is often helpful to confer with staffroom colleagues to find out how these are developed in other subject areas. This also has the potential to establish better and more productive connections across related aspects of learning.

Analytical skills are required in order to identify relationships and investigate the constituent parts of works of art, craft and design. This may involve, for example, comparing and contrasting the way visual elements of light, colour, texture and composition have been used by different artists, photographers, craftspeople and designers for the same, or different, purposes. Tony Dyson proposes six types of comparison:

- Art [and design] objects/everyday objects;
- Different art [and design] objects with the same subject matter;

- Students' own work/appropriate art [and design] objects; arte facts of different periods;
- Objects, texts, etc. of the same period;
- Art [and design] objects of a particular school or period.

Other methods include the use of Rod Taylor's4 'Content', 'Form', 'Process' and 'Mood'; Bloom's taxonomy: 'Description', 'Analysis', 'Interpretation', 'Evaluation' and 'Influence'; more recent updates of this taxonomy such as 'Remembering', 'Understanding', 'Applying', 'Analysing', 'Evaluating' and 'Creating'5; and SPEAR: 'Social', 'Political', 'Educational', 'Artistic' and 'Religious'. Reference to models used, for example in English and History departments, can also prove useful.

Students develop critical skills so that they can dig deeper below the surface of the subject they are studying. Good critical analysis enables the use of ideas, images and text as means of interrogating received opinion in order to form knowledge and understanding based on an awareness of how art and design functions and is valued in different cultures, societies and times. It asks questions such as: 'Who?', 'Why?', 'Where?', 'When?', 'How?'

Such critical thinking is not limited, of course, to art and design; it is a skill that has much broader applications. Art and design educational encourages the capacity for independent thought. It requires students to:

- be aware of the reasons for what they think and what they do;
- question and critically evaluate their own thoughts and actions;
- To clearly present too the reasons for their thoughts and actions.

Although critical thinking and rational thought are important skills to develop, equally important are those creative skills that may involve intuition, non-directed thought and unconscious mental processes.

What should be encouraged or avoided in developing responses to AO1?

- It is usually best to concentrate on the most relevant references sources and study these in significant depth rather than a plethora of sources that are only partially understood or not understood at all.
- Contextual understanding must *inform* personal creative developments and

not *determine* what these are going to be. In other words, be very clear about the use and misuse of copying, parody, pastiche and transcriptions.

SUBJECT – MATHEMATICS

Grade 10 -Mathematics - Summer Vacations Work						
Unit	Chapter	Page	Topic	Examination Practice	Past Papers	Due Date to submit on Google Classroom
2	5	121-122	Fraction	Q 1 to 4	Q1 to 10	May 29
2	6	132	Equation	Q 1 to 3	Q1 to 7	May 29
2	7	158-159	Perimeter, Area &Volume	Q 1 to 3	Q1 to 5	May 31
2	8	170 -172	Probability	Q 1 to 6	Q1 to 5	May 31
3	9	195-196	Sequence & Set	Q 1 to 2	Q1 to 8	June 4
3	10	224-225	Straight line& Quadratic Equations	Q 1 to 2	Q1 to 4	June 4
3	11	251-251	Pythagoras Theorem & Similar Triangles	Q 1 to 4	Q 1 to 3	June 8
3	12	275-276	Averages and Measures	nil	Q 1 to 3	June 8
1-3	1 to 12	277-280	Combined all Units1 to 3	Q 1 to 10	Q 1 to 3	June 12
4	13	299-300	Measurement	Q 1to 3	Q 1 to 5	June 16
4	14	332-334	Equations & Inequalities	Q 1& 2	Q 1 to11	June 20
4	15	380-382	Trigonometry	Q1 to 9	Q 1 to 6	June 24
4	16	391-393	Scatter Diagram	Q 1 & 2	Q 1 & 2	June 28

SUBJECT – ICT

Ch-4 Networks and the effects of using them

1. How a router works and its purpose? How it routes the data packets?
2. What are the uses use of other common network devices, including: network interface cards, hubs, bridges, switches, modems?
3. How computers can use WiFi to connect to a network?
4. Compare and contrast Bluetooth and WiFi
5. What is the purpose of common network environments, such as intranets and the internet?
6. Describe the differences between a LAN, a WLAN and a WAN

Ch-5 Effects of IT on employment

1. Describe how there has been a reduction of employment in offices, as workers' jobs have been replaced by computers in a number of fields (e.g. payroll workers, typing pools, car production workers)
2. Describe what is meant by part-time working, flexible hours, job sharing, compressed hours
3. Analyze the impact of microprocessors controlled devices in the home on our lifestyle (e.g. the amount and use of leisure time, the degree of social interaction, the ability to leave the home)
4. Describe the potential health problems related to the prolonged use of IT equipment and the strategies to minimize the health risks

Ch-6 ICT applications

1. Describe the use of internet telephony, including Voice Over Internet Protocol (VOIP)
2. Discuss the advantages and disadvantages of using computers in measurement rather than humans.
3. Explain the need for conversion between analogue and digital data.

4. Describe the use of computer control in applications such as automatic washing machines, computer controlled central heating systems and burglar alarms.
5. How a robot can be used in manufacturing systems, explain its advantages and disadvantages.
6. Describe how school management systems can be used for organizing examinations, creating timetables and managing teaching cover/substitution
7. Describe how 3D printers can be used in producing medical aids (e.g. surgical and diagnostic aids and development of prosthetics)
8. Discuss the role of expert systems in mineral prospecting and car engine fault diagnosis.
9. What is GIS? Explain its purpose.
10. Describe the computer processing involved in Electronic Funds Transfer (EFT)

SUBJECT – GLOBAL PERSPECTIVE

Team Project

Topic: Human Rights

Method of Display: brochure

SUBJECT – ECONOMICS

PRACTICE QUESTIONS

UNIT 3: Microeconomic decision makers

3.1 Money and banking; 3.2 Households; 3.3 Workers; 3.4 Trade unions; 3.5 Firms; 3.6 Firms and production; 3.7 Firms' costs, revenue and objectives; 3.8 Market structure

Structured questions

- 1 The actions of the Government of Georgia to reduce inflation and unemployment had an impact on the business organisations operating in the country in 2015. The country has an expanding tertiary sector including its banking sector. The country now has some features of a market economy.

- (a) Identify two goals that business organisations may have. [2]
- (b) Explain two functions of a commercial bank. [4]
- (c) Analyse how the price mechanism influences the allocation of resources in a market economy. [6]
- (d) Discuss whether an increase in output will increase the profits that firms receive. [8]

2 Money and banking are closely linked. Money performs a number of functions, including being a standard for deferred payments, and it is used to pay workers, often directly into their bank accounts. The amount workers earn differs depending on the industry in which they work. Bank lending from both private sector and public sector (state-owned) banks has increased in some countries in recent years.

- (a) Define ‘a standard for deferred payments’. [2]
- (b) Explain two reasons why agricultural workers may be paid less than manufacturing workers. [4]
- (c) Analyse why private sector banks may earn higher profits than public sector banks. [6]
- (d) Discuss whether an increase in bank lending will benefit an economy. [8]

3 In 2012 oil was discovered in Kenya, but in 2014 an American firm stopped its plans to explore for oil in the Arabuko Sokoke forest in the country. The relative sizes of Kenya’s primary, secondary and tertiary sectors are changing. The amount of capital goods in the country is also increasing.

- (a) Define the ‘secondary sector’ and give an example. [2]
- (b) Explain two benefits that an economy may gain as a [4]

result of the discovery of oil on its land.

- (c) Analyse why the social costs of oil extraction may be greater than the private costs. [6]
- (d) Discuss whether a country would benefit from devoting more resources to producing capital goods. [8]

4 Indonesia's output is influenced by its factors of production. A production possibility curve diagram can be used to show this relationship between resources and output. Indonesia does have extensive fishing waters but does not actually catch many fish. Most of its fishing firms are small and they compete against much larger foreign firms. These larger foreign firms have been attracted into Indonesia's waters because of increasing demand for fish. The price elasticity of demand for different types of fish has changed in the last few years.

- (a) Identify the two human factors of production. [2]
- (b) Explain two economic concepts shown by a production possibility curve diagram. [4]
- (c) Analyse why demand for a product may become more elastic over time. [6]
- (d) Discuss whether small firms can compete successfully against large firms. [8]

5 In 2015 some German commercial banks reduced their already very low interest rates on deposit accounts. The German Government was hoping that such a change would encourage more Germans to buy shares in German firms. The ability of German firms to buy capital goods would be increased if they could sell more shares or borrow more from commercial banks.

- (a) Identify two ways a commercial bank differs from a central bank. [2]

- (b) Explain the connection between opportunity cost and the purchase of shares. [4]
- (c) Analyse how a fall in the rate of interest may affect a country's exchange rate. [6]
- (d) Discuss whether an increase in spending on capital goods will help to achieve the aims of government policies. [8]
- 6 In 2015, money sent home by Nepalese workers working abroad accounted for 29% of Nepal's total income. These remittances also contributed positively to the country's current account position on its balance of payments. In Kerala, a state in India, remittances accounted for 36% of total income, with people from the state going abroad to undertake a range of jobs including working as dentists and hotel cleaners.
- (a) Identify two factors that affect an individual's choice of occupation. [2]
- (b) Explain two effects of a country having a surplus on the current account of its balance of payments. [4]
- (c) Analyse why dentists are paid more than hotel cleaners. [6]
- (d) Discuss whether an economy will benefit from recruiting workers from other countries. [8]
- 7 2015 saw more than US\$4000 billion-worth of mergers worldwide, many in the USA and the UK. Some mergers occur between firms in different countries. These are influenced by a number of factors, including the size and structure of the markets in the countries and their exchange rates. Mergers influence the level of competition in markets.
- (a) Define 'conglomerate integration'. [2]
- (b) Explain why firms in a perfectly competitive market are price-takers. [4]

- (c) Analyse the causes of an increase in a country's exchange rate. [6]
- (d) Discuss whether a large firm will always have lower average costs of production than a small firm. [8]

8 Qatar is a growing economy and has benefited from the expansion of the insurance industry. This industry is currently dominated by one firm and is a long way from perfect competition. The economy has also experienced a general increase in labour productivity. However, the nature of the relationship between free trade and economic growth is debated among economists.

- (a) Define 'perfect competition'. [2]
- (b) Explain two influences on the size of firms. [4]
- (c) Analyse the causes of an increase in labour productivity. [6]
- (d) Discuss whether a country that engages in free trade is likely to have a higher economic growth rate than one that uses trade protection. [8]
- (d) Discuss whether a country that engages in free trade is likely to have a higher economic growth rate than one that uses trade protection. [8]

9 Singapore is usually ranked as one of the best countries in which to do business. It is an open economy engaging in free trade. It has a history of strong entrepreneurship, low unemployment, low average costs and relatively low tax rates. Its example may encourage other countries to remove trade restrictions.

- (a) Define 'average costs'. [2]
- (b) Explain two factors that would increase the supply of entrepreneurs in an economy. [4]

- (c) Analyse how the market for a product would be affected by a reduction of the tax on the product combined with a fall in the price of a complement. [6]
- (d) Discuss whether low unemployment in a country will encourage multinational companies (MNCs) to set up there. [8]
- 10 Rich people in some countries are now working for more hours on average than poor people. One reason for this is thought to be that well-paid jobs provide more job satisfaction. Gaining enjoyment from work can lead to high labour productivity.
- (a) What is a possible opportunity cost of working? [2]
- (b) Explain two reasons why older workers tend to earn more than younger workers. [4]
- (c) Analyse, using a production possibility curve diagram, how an increase in labour productivity will affect an economy. [6]
- (d) Discuss whether the rich in one country will save more than the rich in another country. [8]
- (a) Identify **two** features of a sole proprietor. [2]
- (b) Explain how government subsidies can increase the size of firms. [4]
- (c) Analyse **three** advantages of small firms. [6]
- (d) Discuss whether imposing tariffs will benefit an economy. [8]