	NAME:
10	YEAR 13

## LABASA SANGAM (SKM) COLLEGE YEAR 13 ENGLISH WORKSHEET 1- WEEK 13

Read the passage given below and the questions that follow in the space provided.

### **Cultural Dimension to Youth Entrepreneurship**

When we refer to a country's resources and wealth, we refer to their economic position, the availability of natural resources, financial status as well as the state of technological growth etc. However not much attention is given to assess the human capital especially the youth capital. It is true that youth is the future of every nation, a fact that most people tend to forget. Every nation seems to be caught up in chasing current priorities and not giving sufficient attention to the development of youth which is going to be the future human capital.

If the youth have to be developed as a resourceful and innovative future generation, the effort has to be put in by all including family, society, community, schools, colleges as well as industry and government too. As such each of these has a significant role to play in contributing to creation of Youth Entrepreneurship.

Family and Community play a very significant and important role in directing and guiding the youth in pursuing their future. Normally communities and societies that have had to struggle or have been striving for economic sustenance are seen to promote a view that the youth should take up a job and start contributing to the family's income and help with the expenses.

Most of the third world countries and the rural youth population face this reality. The social and cultural background of the families and community either support or inhibit enterprising culture and behaviour. A community that is sensitive to the development of aspirations of the youth nurtures the same and creates a trend for self-employment. We see from the recent history that American society has promoted a culture of youth entrepreneurship resulting in hundreds of YE in the Silicon Valley as well as other areas. Europeans especially the Youth in UK seem to be motivated towards taking up jobs and not necessarily striving to be on their own. A culture that is forgiving and allowing one to make mistakes and learn from them breeds Youth Entrepreneurship and creativity. The cultural outlook of societies at large is a result of history and years of tradition that have been passed on from generation to generation.

At micro level, the outlook of the community and family towards money, standard of living, education as well as their aspirations guide their thought process for the Youth too. A prosperous and progressive society creates a healthy environment and demand for products and services thus creating business opportunities. The awareness of importance of education and their traditional view of education too plays an important part that helps the youth dream, aspire and strive to explore new ventures and opportunities to grow their knowledge, allows free thinking, exhibit their talent, strive for economic independence as well as work for social services or inhibits them, their thinking and growth.

Historically China, India and Persia as well as Europe were the centres that promoted education and advancement in all fields of science and technology. Modern times have seen America and Europe becoming the international educational hubs drawing thousands of students from all over the world. The outlook of the American and European Universities have shaped the outlook of its students who have turned out to be progressive, enterprising and excellent human beings who have contributed to and given back to the society at large.

This cultural outlook and the resultant effect on the youth have prompted parents of all nationalities to send their children abroad for higher studies. If scientists and doctors as well as IT professionals are always looking to migrate to America from the rest of the world, it is because of the freedom and opportunity as well as the spirit of Entrepreneurship that the country provides for the youth.

Each and every community as well as society tends to have its own cultural outlook that is aggressive, peace loving, progressive, liberal, conservative etc. The outlook of the community has a bearing on the overall lifestyle and thinking of the younger generation as well as the outlook and progress of the nations too.

Coming out of the cultural mindsets, nations today have recognised the need to build and train their youth by providing education and skills necessary to make them job creators rather than job seekers. Several programs and funds have been provided by the Countries Governments as well as the World Organisations like ILO, UNESCO and others. However, the effort towards building awareness and providing training is miniscule compared to the need at the global levels. While the Governmental agencies are trying their best to promote Youth Entrepreneurship, there is a lot more that NGOs and Industries as well as Educational Institutions can do both at national and international levels. Collaboration and Collective participation can help make a better future for the coming young generations.

Ques	LIOIIS
	1. Explain what Third World Countries refers to in paragraph 3. (1 m)
m)	2. What type of communities do youths need in order to be successful entrepreneurs?(1
	3. What is the effect of America's attempt to provide Youth Entrepreneurship?(1 m)
	4. Identify two factors that will help youths develop their Entrepreneur skills?(2 m)
	5. State two reasons for the constant migration to America from other countries.(2 m)

6. What is the principal factor hindering youth Entrepreneurship in the world?(1 m)
7. Identify a complex sentence in the last paragraph. (1 m)
, v zweming w comprom semester in the most puring up in (1 in)
8. How have successful countries attempted to address the rigid and cultural mindsets of
s people? (1 m)

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NAME:	 	
YEAR 13		

#### <u>LABASA SANGAM (SKM) COLLEGE</u> YEAR 13 ENGLISH: WORKSHEET 2- WEEK 14

#### Part 1

Write a summary of the following passage using your own words. Your summary should be between 95-100 words.

Youth, defined by the United Nations as persons between the ages of 15 and 24, is a transitional period from childhood to adulthood. By this definition, it represents almost 18 per cent of the current global population. A vast majority of the 1.2 billion youths in the world today live in developing countries (84 per cent in 1995 which is projected to increase to 89 per cent by 2020).

In 2005, 61.8 per cent of the youth population of the world lived in the Asian and Pacific region. Due to decline in fertility rates in the countries of the region, the Asia-Pacific has witnessed a —youth bulgel or a demographic bonus where 20 per cent or more of a national population are aged 15 to 24 and there is a growing cohort of working-age adults relative to the dependent population.

Owing to a combination of factors, youth in the Asian and Pacific region today are better poised than ever before to participate in, and benefit from the advancement of social, economic and political developments. Compared to previous generations, a higher proportion of young people in the region have completed primary schooling. They are achieving better education, with the gross enrolment rate at the tertiary level reaching 18 per cent and 15 per cent respectively for male and female youths. The majority of youths in the region are healthy, having survived childhood years, which only a few decades ago had considerably higher infant and child mortality. Furthermore, across the region, young people show initiatives to participate in local, national and regional development as important and equal participants, rather than as passive bystanders unable to shape their own future.

Although the present cohort of youth has numerous advantages and assets, it also faces a complex and rapidly evolving situation where new opportunities coexist with major challenges. Fierce competition is affecting the marketplace and its rules and practices in the region. Youth often remain in a vulnerable situation and lack the requisite knowledge and skills to adapt to the changing economic and social environment. In Asia, youth made up 20.8 per cent of the labour force in 2004, but unemployed youth accounted for nearly half (49.1 per cent) of the region's jobless people.Long-term unemployment leads to a wide range of social ills to which young people are susceptible such as delinquency and substance abuse, and often feeds political unrest and violence. In addition, exacerbating the situation are very limited knowledge and poor access to health services related to the prevention of HIV infection, drug use and other health risks, particularly among those who are out-of-school in rural areas.

thi	s space for listi	ng the main point	ts, planning an	d drafting.
te y	your summary	in the space giver	ı below. Use bo	etween <u>95 and 100 words.</u>
	Title:			
Ma	arker's Use On	ly		No. of Words:
	Points	Language	Cohesion	Total
	<del></del>	<del>                                     </del>	+	

#### Part 2

#### VERBS 1 (2 marks)

Underline the verbs in the following sentences.

- 1. Our team played over its head in the first half.
- 2. Once, a circus horse literally stuck his right hind foot into his mouth.
- 3. Helen enjoys responsibility.
- 4. The murderer appears in the second act.

20
/

NAME:	
YEAR 13	

# LABASA SANGAM (SKM) COLLEGE YEAR 13 ENGLISH SHORT TEST 2- WEEK 15

#### A. ANTONYMS (5 marks)

Find antony	ms for	each of	these	words

a.	give	f. difference-
b.	cautious	g. impecunious-
c.	persuade	h. certain-
	•	i. frivolous-
	cowardly	j. sensitive-

#### **B.** CONFUSING PAIRS (5 marks)

Underline one of the words in brackets that can replace the italicized word or phrase.

- 1. The Olympic torch was *carried* by the marathon runner. (born /borne)
- 2. The students *are likely to feel indignant about* having to assemble and stand about in the hot sun for more than an hour. (recent /resent)
- 3. Nurses are members of a *kind and merciful* profession. (human /humane)
- 4. Arms and explosives are *illegal* imports. (elicit /illicit)
- 5. Insect life in the tropics becomes most *active and diligent* during the wet season. (industrious / industrial)

#### C. PREPOSITIONS (10 marks)

Complete the following by supplying the correct prepositions.

EXAMPLE: deceived by her smile

1. Dissuaded \_\_\_\_\_\_ trying

2. Replenish \_\_\_\_\_ supplies

3. Conscious \_\_\_\_\_ the temperature

4. Elicit \_\_\_\_\_\_ him

- 5. Vicinity \_\_\_\_\_ the church6. Resented \_\_\_\_\_ the rest of the class
- 7. Disapprove \_\_\_\_\_loud music
- 8. Absent \_\_\_\_\_ work
- 9. Hindered \_\_\_\_\_ the crowd
- 10. Irresponsible \_\_\_\_\_ her

#### THE END.

#### YEAR: 13 – AGRICULTURAL SCIENCE

#### WEEK 13 AND 14 WORKSHEET 13 AND 14

NAI	ME:	_	YEAR:	
DUE DATE: 18-10-2021 STRAND 3 – Agronomy			TOTAL MARKS: 10 [5%	7]
			SUB STRAND – HORTICULTUR	RE
1.	Define roof gardening	[1 MARK]		
2.	State the 1 advantage a	nd 1 disadvantage of roof	gardening [2 MARKS]	
3.	List 2 suitable areas for	r establishing a roof garder	ı. [1 MARK]	
4.	State one purpose of ro	of gardening [1 MARK]		
5.	Differentiate between a to be planted. [2MARK	• •	of garden in relation to the selection in vegeta	ıbles
6.	How does rooftop gard	ens reduce the temperature	e inside and outside houses? [1 MARK]	
7.	Identify the 1type of pl	ants which can be grown o	on roof top gardens in Fiji. [1MARK]	
8.	Define bio intensity ga	rdening [1 mark]		

#### **HOME STUDY PACKAGE**

Year/Level: 13B Student Name: \_\_

School: Labasa Sangam (SKM) College

Subject: Applied Technology

Date: 27<sup>th</sup> Sep- 1<sup>st</sup> Oct 2021 Worksheet Number 1-2 Week 13 Due Date: 18<sup>th</sup> October 2021 **Question 1** 1. Discuss the difference between a two stroke and four stroke engines. (3 marks) 2. Define two stroke engine? (2 marks) 3. Differentiate between Connecting rod and Crankshaft. (2 marks) 4. Explain the difference between suction stroke and compression stroke? (2 marks) 5. Write down 2 advantages of a four stroke Engines? (2 marks)

6. Write down 3 disadvantages of a four stroke Engines?	
	(3 marks)
7. Define Spark plug	
	(2 marks)
8. Define Camshaft	
o. Zerme Cumonare	
	(2 marks)
9. Differentiate between Flywheel and Piston rings	

(2 marks)

#### WORKSHEET ASSESSMENT WEEK 13

#### **Question 2**

1.	State the difference between Power stroke and Exhaust stroke	0%
		<u> </u>
2.	State one Advantage and Disadvantage of a 4 Stroke Engine	(2marks)
		<u> </u>
3.	Define Manifold	(2marks)
		<del>-</del> 
4.	State what you understand by the word Engine bearing	(1mark)
		_ _ _
5.	State what happens in Exhaust	(1mark)
		<del>-</del> -
		_ 
6.	Differentiate between Intake and Compression	(2marks)
		_ _ _
		(2marks)



## HOME STUDY PACKAGE

#### YEAR 13 BIOLOGY

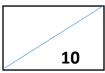
**Ref: Porifera** 

**WORKSHEET 13:** 

l.	What are characteristics of phylum porifera?	
		(2 marks)
2.	Where are phylum porifera found?	
		(1 mark)
3.	How do porifera feed?	
		(2 marks)
١.	How are sponges classified?	
		(2 marks)
•	Why are sponges considered to be animals?	
		(1 mark)
).	What are the modes of asexual reproduction in porifera?	
		(2 mork)

#### HOME STUDY PACKAGE

#### **WORKSHEET NUMBER 13**



STUDENT NA	\ME:		YEA	AR: 13	
SUBJECT: CHEMISTRY		DUE	DATE: 18 <sup>TH</sup> OCTOB	ER, 2021	
Refer to the No	otes on Inorganic	Chemistry from	n Pages 1 - 7		
Write the answe	ers in the space pr	rovided.			
1. When a hydr	ogen atom gains	an electron, it en	nds up with two e	electrons in its outer ene	ergy level and thus is
called a	·				(1 mark)
2. Which of the	following molec	ules would be n	nost polar?		
A. H <sub>2</sub>	B. HF	C. HCl	D. HBr		(1 mark))
3. Suggest reason	ons for the follow	ring.			
a. The boiling p	point of CH <sub>4</sub> is m	uch lower than t	hat of HF.		
					(1 mark)
h CH4 is more	stable than SiH <sub>4</sub> .				
o. C114 15 more	stable than 51114.				
					(1 mark)
•	the bonning point r than the OH bon		i nigher than the	boiling point of HF, eve	in though the AF bond
is more point		iu.			
					(1 mark)

					(1 m
		the name and form			
Name	a.	Beryllium oxide	c.	Nitrogen dioxide	
Name Formula	a. Li <sub>2</sub> O		<b>c.</b> B <sub>2</sub> O <sub>3</sub>		
		oxide		dioxide	
Formula	Li <sub>2</sub> O	oxide	B <sub>2</sub> O <sub>3</sub>	dioxide	(1 r

#### HOME STUDY PACKAGE

#### **WORKSHEET NUMBER 14**

10

STUDENT NAME:	YEAR: 13		
SUBJECT: CHEMISTRY	<b>DUE DATE: 18<sup>TH</sup> OCTOBER, 2021</b>		
Refer to the Notes on Inorganic Chemistry from	Pages 7 – 16		
Write the answers in the space provided.			
1. Write the electron configuration of Mn <sup>2+</sup> .			
2. Explain why the electron configuration of chro	mium is [Ar] $3d^5 4s^1$ and not [Ar] $3d^4 4s^2$ .	(1 mark)	
		(2 marks)	
3. State the colour of the following compounds.			
a. $FeCl_3$ b. $ZnSO_4$		(2 marks)	
4. Consider the following metals: Fe, V, Zn			
a. Which metal does not form coloured compound	ds at room temperature?		
		(1 mark)	
b. Which metal has an oxide that is used as a cata	lyst in the synthesis of sulphuric acid?		
		(1 mark)	
5. Name the following complex ions:		(4	
a. [CuCl <sub>4</sub> ] <sup>2-</sup>		(1 mark)	
b. [Fe(CN) <sub>6</sub> ] <sup>4-</sup>		(1 mark)	
c. $[Fe(H_2O)_6]^{3+}$		(1 mark)	

#### SHORT TEST TWO



STUDENT NAME:	YEAR: 13	20
SUBJECT: CHEMISTRY	DUE DATE: 18 <sup>TH</sup> OC	CTOBER, 2021
Write the answers in the space provided.		
1. Write the equilibrium expression for the following $CO_3^{2-}$ (aq) $+ HSO_4^{-}$ (aq) $\rightleftharpoons HCO_3^{-}$ (ac)	owing reaction: $O_4^{2^-}$ (aq)	
2. Explain what an amphiprotic substance is usi	ng water as an example. Write equa	(2 marks) ations to support your answer
3. Calculate the pH of the following:		(2 marks)
a. 0.02 mol/L HCl		
b. 0.1 mol/L NaOH		(2 marks)
		(2 marks)

4. Calculate the pH for an aqueous solution of 0.01 mol/L ethanoic acid. $K_a$ = 1.74 x $10^{-4}$ at 25°C	
	(2 marks)
5. Calculate the pH for a 0.2 mol/L aqueous ammonia solution.	(3 marks)
S. Calculate the pri for a 0.2 month aqueous animonia solution. $K_b = 1.7 \times 10^{-5} \text{ at } 25^{\circ}\text{C}$	
11,7% TO the 25 C	
	(3 marks)

6. The solubility of a saturated solution of silver sulphate, $Ag_2SO_4$ , is 1./5x10° mol/L. Calculate the $K_{sp}$ of the
silver sulphate.
(2 marks)
7. Determine if a precipitate of AgI will form if 25.0 mL of 1.4 x 10 <sup>-9</sup> mol/L NaI and 35.0 mL of 7.9 x 10 <sup>-7</sup>
mol/L AgNO <sub>3</sub> are mixed. ( $K$ sp (AgI) = 8.5 x $10^{-17}$ )
(A marks)

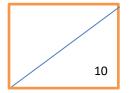
#### **HOME STUDY PACKAGE 5**

#### **LABASA SANGAM (SKM) COLLEGE**

#### **COMPUTER STUDIES-2021**

#### **YEAR 13**

#### **WORKSHEET 13**



#### **CHAPTER 1: INFORMATION SYSTEM**

**DUE DATE FOR SUBMISSION : 19<sup>TH</sup> October** 

WEIGHTING: 5%

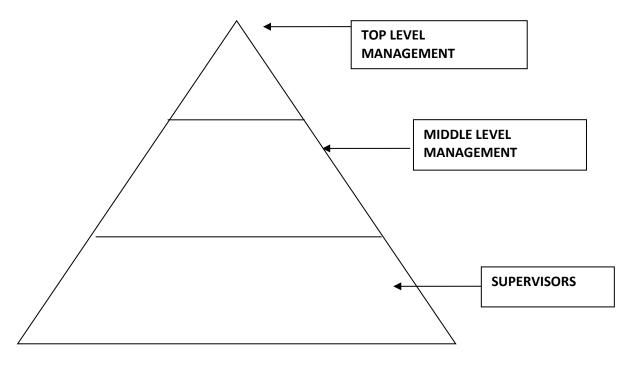
10 MARKS

FULL NAME:

YEAR:\_\_\_\_\_

QUESTION 1: [10 marks]

A. Use the diagram below to answer the questions which follow



State the **primary role** of

I. Top Management

\_\_\_\_\_

(1 mark)

II. Middle Management

III.	Supervisors	(1 mark)	
		(1mark)	
B.	Depending on the services or products they provide most organizations have	department	
	that specializes in one of 5 basic functions. List the 5 basic functions of an organization	ization?	
		(5	
	marks)	(5	
C.	List <b>two</b> duties that are handled by a Production department.		
	(2 m	arks)	

	STUDENTS NAME:		YEAR:	
--	----------------	--	-------	--

#### HOME STUDY PACKAGE LABASA SANGAM (SKM) COLLEGE

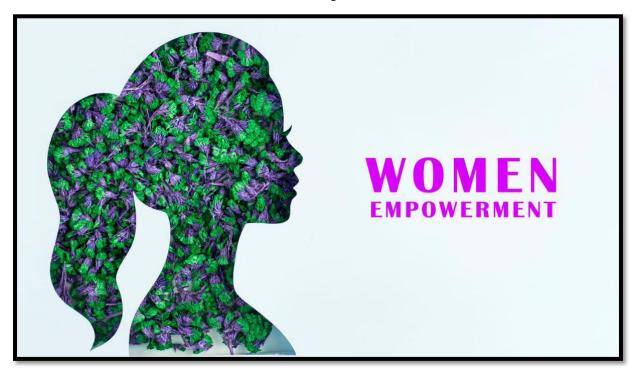
**YEAR: 13** 

**SUBJECT: GEOGRAPHY** 

**WORKSHEET 13** 

**TOTAL MARKS 10 (WEIGHTING 5%)** 

**Resource Interpretation** 

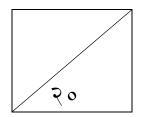


Source: www.google .com

Explain how women contribute to population change in the world. Provide five points with example. Each point with relevant example is worth 2 marks.

Point 1	Example

STUDENTS NAME:	YE	AR:
Point 2	Example	
Point 3	Example	
Point 4	Example	
Point 5	Example	



<u>LABASA SANGAM (SKM) COLLEGE</u>							
<u>WEEK</u> -13	<u>wor</u>	RKSHEET - 1	<u>YI</u>	EAR <u>13</u>			
				NAME		YEAR -	
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३ नाटक व अंक २	ो महिला पात्र प्रि <sup>.</sup>	यंगुमंजरी के दु	वारा मोहन	राकेश हमें	<sup>:</sup> क्या सन्देश	ा देना चाह	ता है

४ मल्लिका को क्यूँ हठीली पुत्री कहा गया है 🏶 उदहारण देकर समझाइए 🏶 अंक १

#### ५. नाटक दुवारा मां -बेटी के रिश्ते पर प्रकाश डालीए 🏶 🧪 अंक २

#### ६. आषाढ़ का एक दिन के नामकारण पर चर्चा कीजिए 🏶 🧪 अंक २

#### Page 1 of 5

#### LABASA SANGAM (SKM) COLLEGE

#### YEAR 13 HISTORY WEEKLY PACKAGE 2021

#### **WEEK 13 WORKSHEET**

	Name of the student:	Year: 13D
SH	ORT ANSWER QUESTIONS	
1.	Name the leader that wrote to Queen Victoria to include Niue into the Br state the year the request was made.	itish Empire and
••••		(2 marks)
2.	Describe how Niue was granted British colonial status.	
3.	Discuss <b>two</b> reasons why the Niueans were hesitant to attain self-govern	(2 marks) ment.
	Explain a factor that led to the increase in criminal activity between 1940	(2 marks)
5.	Explain <b>two effects</b> of the migration of the Niueans to New Zealand.	(2 marks)
		(2 marks)

#### Page 2 of 5

#### LABASA SANGAM (SKM) COLLEGE

#### YEAR 13 HISTORY WEEKLY PACKAGE 2021

#### **WEEK 14 WORKSHEET**

)	Name of the student: Year: 13D	
	ORT ANSWER QUESTIONS	SH
	Discuss <b>two important</b> efforts by the government to rebuild the country of Niue.	1.
(2 marks)		• • • •
	Explain <b>any two reasons</b> why the Niueans are not willing to return to their island.	2.
(2 marks)		• • • •
	State <b>two reasons</b> why some Niueans have chosen to return to the island.	3.
(2 marks)		• • • •
	State <b>two provisions</b> of the constitution that were accepted by the Niueans.	4.
(2 marks)		
w Zealand.	Describe the provision of the new constitution regarding Niue's relationship with New	5.
(2 marks)		

#### Page 3 of 5

#### LABASA SANGAM (SKM) COLLEGE

#### YEAR 13 HISTORY WEEKLY PACKAGE 2021

#### **WEEK 15 WORKSHEET**

Name of the student:	Year: 13I
Name of the student.	1 Eal: 151

#### RESOURCE INTERPRETATION



 $182\ Fijians\ departed\ for\ Australia\ to\ start\ work\ under\ the\ Pacific\ Labour\ Scheme.$ 

	List <b>two reasons</b> why many Fijians moved to Australia after independence.
•••	(2 marks)
	Discuss <b>one political effect</b> of the migration of Fijians to Australia.
	(2 marks)
	According to the data given on page 10, which qualification most Fijian migrants have attained and which occupation most Fijians got into?
	(2 marks)
4. 	Which <b>two states</b> in Australia have the most number of Fijian residing in it.
	Distinguish between Immigration and Emigration.
	(2 marks)

#### REVISIONAL QUESTIONS FOR FINAL ASSESSMENT

**ESSAY WRITING** (10 marks) Write an essay of 180 - 200 words on the following question. Discuss three problems the British faced when administering over the three islands.

#### **HOME STUDY PACKAGE 5**

#### LABASA SANGAM (SKM) COLLEGE

#### **HOME ECONOMICS – YEAR 13**

#### **WORKSHEET**

NAME:	
YEAR: 13	

**DUE DATE: 18/10/2021** 

#### **WORKSHEET: MILK**

**TOTAL MARKS: 10 marks** 

**WEIGHTING: 5%** 

#### SHORT ANSWER QUESTIONS

Write the answers in the space provided.

1.	List the <b>three</b> proteins present in milk.  (i)	
2.	(iii)  Why is it important to handle milk with care.	(3 marks)
3	Define the term: Hygroscopic	(1 mark)
٥.	Define the term. Trygroscopic	
4.	(i) Give a reason:  When milk is heated, it boils over the sides of the pan.	(1 mark)
	(ii) How can the above reaction be prevented?	(1 mark)
		(1 mark)

5.	State the reason for milk curdling when pineapple is added	
		(1 mark)
6.	List <b>two</b> cultured milk products.	
	(i)	
	(ii)	
		(2 marks)

#### **WORKSHEET: MEAT**

**TOTAL MARKS: 10 marks** 

**WEIGHTING: 5%** 

#### SHORT ANSWER QUESTIONS

Write the answers in the space provided.

1.	Define the term: Marbling
	(1 mark)
2.	List the <b>two</b> main pigments found in meat.
	(i)
	(ii)
	(1 mark)
3.	Discuss the usefulness of the substance bromelin and papain in the cooking of meat.
	(2 marks)
4.	Meat is a widely used commodity. Explain <b>one</b> proper domestic storage technique for
	raw meat.
	(2
	(2 marks)

5.	Expla	in the following terms in regards to meat:	
	(i)	Aging	
	(ii)	Basting	(1 mark)
	C		(1 mark)
6.	State	why grilling is suitable for some <b>cuts</b> of meat.	
			(2 marks)

THE END

NAME:	
YEAR: 13_	

#### LABASA SANGAM (SKM) COLLEGE YEAR 13 MATHEMATICS -WORKSHEET 1 **TOTAL MARKS - 10 WEIGHTING - 5%**

# 10

#### **Instructions**

Answer all the questions in the space provided.

Write your name at the top right hand corner of this page.

write you	ii name at the top right han	u corner or this page.		
1. Det	termine $\int 2xe^{x^2}dx$ using the	e substitution $u = x^2$ where	$\int e^x dx = e^x + c$	
	,		•	
		$\int 2xe^{x^2}dx:$		
		J		(2 ½ marks)

Evaluate  $\int 18x^5(x^6+2)^2 dx$  using the substitution  $u = x^6+2$ 2.

 $\int 18x^5(x^6+2)^2 dx _{-}$ 

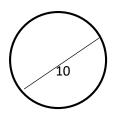
 $(2\frac{1}{2} \text{ marks})$ 

3.	Determine	$\int \sin 5x dx$ where	$\int \sin x = -\cos x + c$

$$\int \sin 5x dx = \underline{\qquad \qquad (2 \frac{1}{2} \text{ marks})}$$

4. Determine  $\int \frac{\cos x}{e^{\sin x}} dx$  using the substitution  $u = \sin x$  where  $\frac{d}{dx} (\sin x) = \cos x$ .

(2½ marks)



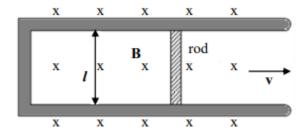
#### **YEAR 13 PHYSICS**

NAME:	
<b>YEAR 13:</b>	

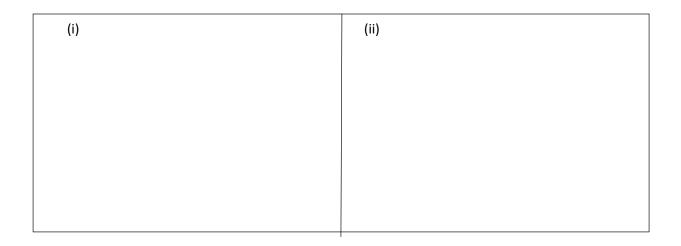
#### WORKSHEET WEEK 13 (5%)

WORKSHEET WEEK 13 (5 70)
STRAND7: ELECTROMAGNETIC INDUCTION AND ALTERNATING CURRENT THEORY
1. Lenz's law is best considered as a consequence of the conservation of
A. charge.
B. energy.
C. current.
D. momentum.
2. When the speed at which a conductor is moved through a magnetic field is increased, the induced voltage
A. increases.
B. decreases.
C. reaches zero.
D. remains constant.
3. Which of the following laws give the direction of induced electromotive force, emf?
A. Lenz's Law
B. Ampere's Law
C. Faraday's Law
D. Coulomb's Law
4. Which of the following is the unit for magnetic flux?
A. Tesla
B. Farad
C. Henry
D. Weber
5. Self-inductance occurs when the is changing.
A. flux
B. circuit
C. current
D. resistance

6. The diagram given below shows a conducting rod moving in a uniform magnetic field into the page. The length, l, of the rod is 0.3 m, the velocity, v, is 4 ms-1 and the magnetic field strength, B, is 0.5 T.



- (i) Calculate the induced voltage produced. (1 mark)
- (ii) Determine the induced current produced, if the total resistance of the loop is  $0.3 \Omega$ . (1 mark)
- 7. A solenoid of radius 2.5 cm has 400 turns and a length of 20 cm. Determine the:
  - (i) inductance of the solenoid. (Use:  $L = \frac{\mu_0 N^2 A}{l}$ ) (2 marks)
  - (ii) rate at which current must change through it to produce an emf of 75 mV. (1 mark)



#### **HOME STUDY PACKAGE**

School: Labasa Sangam (SKM) College Subject: Technical drawing Due Date: 18<sup>th</sup> October 2021 Week: 13/Worksheets: 1-2

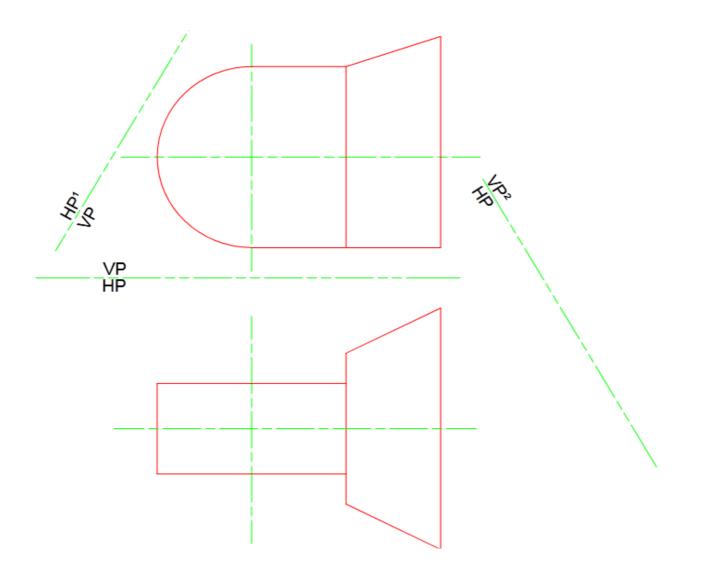
Name: \_\_\_

Year/Level: 13A/B
Date: 27<sup>th</sup> September-1<sup>st</sup> October

#### **QUESTION 1** (15 marks)

**GIVEN**: The plan and elevation of a milled block is drawn in first angle orthographic projection (13 marks) **REQUIRED**: 1. Project the auxiliary views on the respective reference lines indicated beside each view (2 marks)

2. Name each auxiliary view



Question 1			
1	Correct line work	1	
2	All missing lines	1	
	shown		
3	Correct projection	2	
	lines		
4	Accuracy-correct	1	
	measurement		
5	Correct shape drawn	6	
6	Correct shape of	2	
	elevation views		
7.	Auxiliary view names	2	

**QUESTION 2** (15 marks)

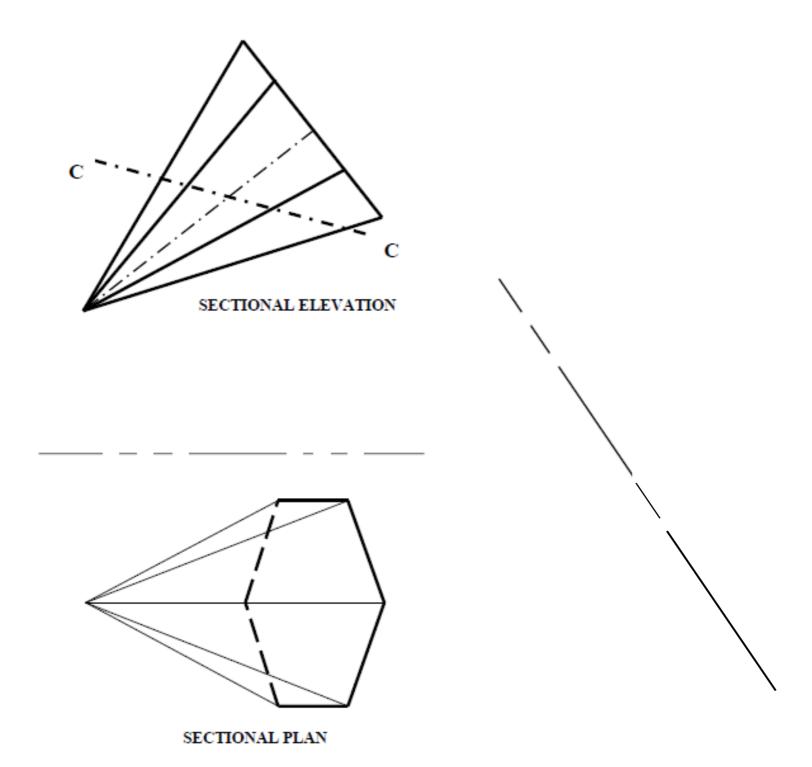
Given: Truncated hexagonal pyramid in 1st angle orthographic projection.

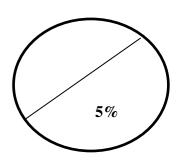
Required:

(i) Complete the sectional plan (3 marks)

(ii) Project the first auxiliary elevation using the reference line provided. (12 marks)

(Note: show all hidden details)





	Question 2		
i)1	Correct shape	1	
2	Correct line work	1	
3	Accuracy	1	
ii)4	Correct line work	2	
5	All missing lines	2	
	shown		
6	Correct projection	2	
	lines		
7.	Accuracy – correct	2	
	measurements		
8	Correct shape of	3	
	auxiliary view		
9	Crrect labeling	1	

