HOMESTUDY PACKAGE 5

WORK	SHEET NO: 1	STUDENTS NAME:
SUBJE	CT: ACCOUNTING	YEAR 11
DUE D	ATE: 18/10/2021	
Total r	marks: 10	Weighting: 5%
Instruc	ctions :	
I. II.	File the lesson notes.	ace provided at the back of this page.
III.	Return the <u>worksheets only</u>	on the due date as stated above.
		WEEK 13
	Explain the purpose of ea Gross profit ratio	ch of the following;
b)	Mark up ratio	
c)	Debt to equity ratio	
d)	Debtors turnover	
2.	State two limitations of ar a)	(4 marks) halysis and interpretation of financial statements.

	(2 marks)
Name two ratios that fall under the category	y of financial stability ratio
	(2 marks)
State two limitations of Ratio Analysis.	
)	

HOMESTUDY PACKAGE 5

WORKSHEET NO: 2	STUDENTS NAME:	

SUBJECT: ACCOUNTING YEAR 11_____

DUE DATE: 18/10/2021

Total marks: 10 Weighting: 5%

Instructions:

I. Write the answers in the space provided at the back of this page.

II. File the lesson notes.

III. Return the **worksheets only** on the due date as stated above.

WEEK FOURTEEN

The following information given below has been extracted from the books of Singh Enterprises for the year ending 30th June 2020.

Statement of Financial Performance of Singh Enterprises For The Year Ended 30th June 2020

	\$
Sales (all credit)	90 000
Less cost of goods sold	<u>54 000</u>
Gross profit	36 000
Less operating expenses	<u>10 400</u>
Net profit	25 600

Statement of Financial Position of Singh Enterprises as at 30th June 2020

	\$	\$	\$
Capital at the beginning		28 400	
Add net profit		<u>25 600</u>	
		54 000	
Less drawings		<u>5 300</u>	
Capital at end			48 700
Current asset			
Accounts receivable	26 000		
Inventory	43 600	69 600	
Less current liabilities			
Accounts payable	19 400		
Bank overdraft	10 300	29 700	
Fixed asset			
Equipment (net)		<u>13 900</u>	

	53 800	
Long term liabilities		
Mortgage	5 100	
		48 700

Additional Information

- a) Opening accounts receivable on 1st July 2019 was \$24 000.
- b) The business operates for 300 days in a year.

Required

Using the information given, calculate the following ratios and percentages (correct to **two decimal places**) for the year ending 30^{th} June 2020. **Show the formula and full working.**

nswer	А	Working	`ormula	Ratios / percentages	
				Net profit percentage	(a)
				Mark up percentage	(b)
				Acid test ratio	(c)
				Working capital in dollars	(d)

	Rate of return on		
	owners equity		
	1 1 1 1		
(e)			
()			
(f)	Debt ratio		
(-)	Dest rates		
(g)	Proprietorship ratio		
(lb)	Accounts receivable		
(h)	turnover in days		
	turnover in days		
(i)	Debt to equity		
()	percentage		
(j)	Working capital		
	ratio		

(10 marks)

FORMATIVE ASSESSMENT TWO

SHORT TEST

ACCOUNTING

YEAR 11

TOTAL MARKS: 20

NAME:	Weighting: 20%
Year 11	Due Date: 18/10/21

Instructions:

- I. Write the answers in the space provided.
- II. Return the **short test** on the due date as stated above.

PART A MULTIPLE CHOICE

(5 MARKS)

- 1. Which of the following indicates the short term financial stability of the business?
 - A. Net profit ratio
 - B. Working capital
 - C. Return on Total assets
 - D. Debtors Turnover

2. Raki's Enterprise's financial position as at 31 December, 2013 was:

Fixed Assets \$125000	
Term Liabilities \$38000	

From the above information, the Debt to Equity percentage of the business would be:

- A. 64.70 %
- B. 54.55 %
- C. 34.54 %
- D. 20.00 %
- 3. One of the limitations of analysis and interpretation of financial statements is that it
- A. allows comparison
- B. helps in making decisions
- C. is based on historical cost
- D. helps to identify strengths and weaknesses
- 4. The following information concerns a local business as at 30^{th} June 2014

Total assets	\$500 000
Non-current assets	\$350 000
Current liabilities	\$50 000
Equity ratio	0.75:1

Calculate the current ratio for the business

- A. 0.33:1
- B. 0.46:1
- C. 2.33:1
- D. 3.0:1
- 5. Young had the following account balances: Sales \$160 000, COGS \$46 000, total expenses \$6 240.

What was his net profit percentage?

A. 63.50%

	ate what each group of ratios listed below measure:
i)	Financial Stability ratios
ii)	Management Effectiveness ratios
	(2 mark

8. CK's business operates in Suva. Given below is the Statement of Financial Position as at 31st October 2014.

	\$	\$	\$
Proprietorship			
Capital – Kaila Yee		100000	
Add Net profit		40000	
Less Drawings		10000	130000
Represented by:			
Assets			
Cash	40000		
Accounts Receivables	35000		
Property & Equipment	125000		
Inventory	10000	210000	
Less liabilities			
Creditors	25000		
Loan (Payable in 5 yrs)	55000	80000	
			130000

Additional Information

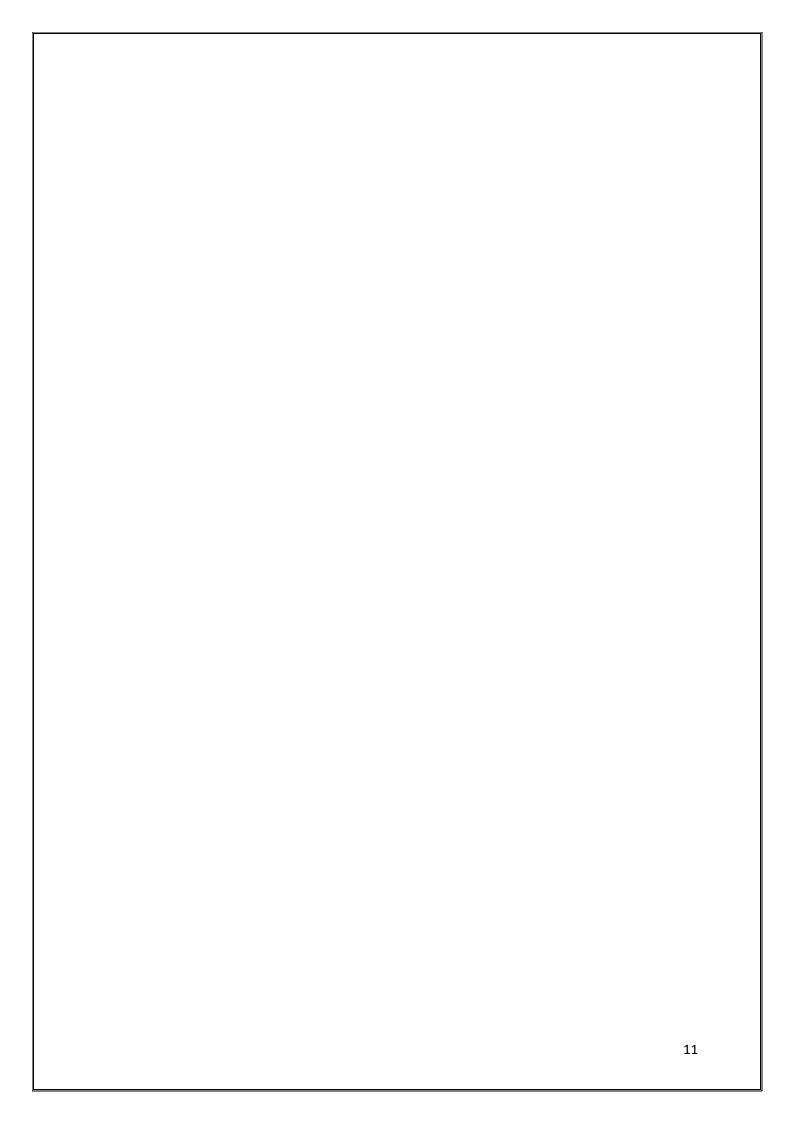
- 1. Sales all credit \$200 000
- 2. Gross profit \$44 000
- 3. Opening stock \$38 000
- 4. Account Receivables 31st October 2013 \$33 000

Required:

- a) Using the information above, calculate the following ratios and percentages for the year 2014. Show the formula and full working.
- 1. Gross profit to sales ratio
- 2. Net profit to sales percentage
- 3. Acid test ratio
- 4. Rate of stock turnover (days)
- 5. Accounts Receivable turnover
- 6. Working capital in dollars
- 7.Mark up- ratio
- 8. Working capital percentage

Gross profit to sales ratio Net profit to sales percentage Acid test ratio Rate of stock turnover in days Working capital in dollars Mark up- ratio Working capital percentage	Ratios /percentages	Formula	Working	Answer
Net profit to sales percentage Acid test ratio Rate of stock turnover in days Accounts receivable turnover Working capital in dollars Working capital percentage	Gross profit to sales	1 01111414		11101101
Net profit to sales percentage Acid test ratio Rate of stock turnover in days Accounts receivable turnover Working capital in dollars Mark up- ratio Working capital percentage	ratio			
Acid test ratio Rate of stock turnover in days Accounts receivable turnover Working capital in dollars Mark up- ratio Working capital percentage				
Acid test ratio Rate of stock turnover in days Accounts receivable turnover Working capital in dollars Mark up- ratio Working capital percentage				
Acid test ratio Rate of stock turnover in days Accounts receivable turnover Working capital in dollars Mark up- ratio Working capital percentage				
Acid test ratio Rate of stock turnover in days Accounts receivable turnover Working capital in dollars Mark up- ratio Working capital percentage				
Acid test ratio Rate of stock turnover in days Accounts receivable turnover Working capital in dollars Mark up- ratio Working capital percentage	Net profit to sales			
Rate of stock turnover in days Accounts receivable turnover Working capital in dollars Mark up- ratio Working capital percentage	percentage			
Rate of stock turnover in days Accounts receivable turnover Working capital in dollars Mark up- ratio Working capital percentage				
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Rate of stock turnover in days Accounts receivable turnover Working capital in dollars Mark up- ratio Working capital percentage				
Rate of stock turnover in days Accounts receivable turnover Working capital in dollars Mark up- ratio Working capital percentage	Acid test ratio	+		
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Accounts receivable turnover Working capital in dollars Mark up- ratio Working capital percentage				
Accounts receivable turnover Working capital in dollars Mark up- ratio Working capital percentage				
Accounts receivable turnover Working capital in dollars Mark up- ratio Working capital percentage				
Accounts receivable turnover Working capital in dollars Mark up- ratio Working capital percentage				
Working capital in dollars Mark up- ratio Working capital percentage	turnover in days			
Working capital in dollars Mark up- ratio Working capital percentage				
Working capital in dollars Mark up- ratio Working capital percentage				
Working capital in dollars Mark up- ratio Working capital percentage				
Working capital in dollars Mark up- ratio Working capital percentage				
Working capital in dollars Mark up- ratio Working capital percentage				
Mark up- ratio Working capital percentage	turnover			
Mark up- ratio Working capital percentage				
Mark up- ratio Working capital percentage				
Mark up- ratio Working capital percentage				
Mark up- ratio Working capital percentage	Working capital in			
Working capital percentage	dollars			
Working capital percentage				
Working capital percentage				
Working capital percentage				
Working capital percentage				
percentage	Mark up- ratio			
percentage				
percentage	Working capital			
	percentage			
	Fire			

(12 marks)



<u>LIVESTOCK PRODUCTION</u> <u>SHORT TEST – YEAR 11</u>

(Based on Wk13-15 Notes)

	E:	(20 MARKS)
1.	Describe the features of milk from an udder infected with mastitis	s. (1mark)
2.	Name the structure used to load and unload cattle on trucks.	
3.	1	
4.	34	
5.	Name two types of records kept on farms.	(1mark)
	1	
	1	
	12	
	1	

7.	Explain one reason why animals raised in intensive housing are more docile than animals raised in extensive fields. (2 marks)
8.	Explain one reason why Coccidiosis is classified as a serious disease of young animals which are being raised in pens . (2 marks)
€.	Explain one reason why farmers castrate male animals which are very young. (2 marks)
10.	Differentiate between a healthy and an unhealthy farm animal in relation to vocalisation . (2 marks)
11.	The diagram below illustrates the two positions on a hanging sheep carcass which are cut during the process of sticking in an abattoir.
	Explain one reason why sticking is important. (2 marks)

NAME:		 	
/EAR:			

HOME STUDY PACKAGE

YEAR 11 APPLIED MATHEMATICS

WORKSHEET 1

Instructions:

- Write the answers in the space provided.
- File the lesson notes.
- Return the worksheet only

Week 13 Activity

STRAND 6: TRIGONOMETRY

SUB STRAND: TRIGONOMETRIC GRAPHS

- 1. A trigonometric graph has the equation $y = 3 \cos 2\theta$
 - a) State the amplitude of this graph.

(1 mark)

b) What is the period of this graph?

(1 mark)

c) Sketch the graph for $0^0 \le \theta \le 360^0$

(2 marks)

2. Sketch the graph of the function
$$y = -2 \sin 2\theta$$
 for $0^0 \le \theta \le 360^0$ (2 marks)

3. Solve the following trigonometric equations:

a)
$$2 \sin x = 1$$
 (2 marks)

b)
$$2 - \cos \Theta = 1$$
 (2 marks)

NAME:			
YEAR:			

HOME STUDY PACKAGE

YEAR 11 APPLIED MATHEMATICS

WORKSHEET 2

Instructions:

- Write the answers in the space provided.
- File the lesson notes.
- Return the worksheet only

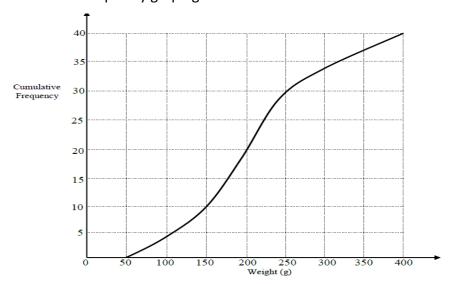
Week 14 & 15 ACTIVITY

STRAND 7: STATISTICS

SUB STRAND: ANALYSIS AND INTERPRETATIO OF STATISTICAL DATA

1.	Seven	students sat for a test. Their scores were 100, 50, 45, 40, 80, 75, 45	
	Find		
	a)	mean	(1 mark)
	b)	median	(2 marks)
	,		,
	c)	mode	(1 mark)
	٥,		(2)
	d)	range	(1 mark)
	uj	range	(I IIIaik)

A sample of pebbles was collected from a beach and their weights were recorded.
 The cumulative frequency graph given below shows the results.



Use the graph to find:

- a) median (1 mark)
- b) inter –quartile range (2 marks)

c) number of pebbles that weigh more than 150 g. (2 marks)

SHORT TEST 2

20% School: Labasa Sangam(SKM) College Year/Level: 11 C/D/E **Subject: Applied Technology** Student Name: ____ Date: 13th October 2021 Worksheet Number: 1-2 / Week 15 **Due date 18th October 2021 Duration: 1 Hour. Question 1 (10 marks)** a) Define the following terms given below in your own words **Elements of Design** (1 ½ marks) b) **Define shape** _____(1 ½ mark) Label the parts of arc welding given below (4 marks) c) 4. 7. d) What does the following safety symbols mean? _____ 3 _____ _____5_____6_____

Question 2 (10 marks)

a)	_
b)	_
c))	_
d)	_
e)	-
f)		-
g)	_
		(7marks)
b) Make	a safety notice for on how you should lift a box from the floor to the work bench?	
•		(3marks)

a) List 7 reasons why is health and safety important in the workshop?

LABASA SANGAM COLLEGE YEAR 11 BIOLOGY-2021 SHORT TEST 2 (20 MARKS)

NAME :_	YEAR
Sh	ort answer questions
1.	A species of frog lays a lot of eggs and provides no significant parental care. Draw
	the survivorship curve for the this frog population and label it (2 marks)
	i. Briefly explain why the human survivorship curve would differ from that of the
	frog population. (2marks)
2.	Define non communicable disease and give 1 example (2 marks)

3.	Using the mark-recapture method, the population size of wild cats on Lomawai Island
	was estimated to be 280. The area of the Island is 10 km ² .
	(i) Calculate the population density of wild cats on Lomawai Island. (2marks)
4.	Define malnutrition. (1 mark)
5.	Give 2 difference the difference between Marasmus and Kwashiorkor. (2marks)

6. Complete the table on essential minerals given below (6 marks)

Mineral	Function	Food source	Deficiency
Calcium	(i)	Dairy products	(ii)
Iodine	For production of Thyroxin.	(iii)	(iv)
Iron	(v)	(iv)	Anaemia – lack of haemoglobin/ red blood cells

7.	Describe three factors that contribute to the rapid spread of HIV AIDS virus (3marks)

The end ©

SHORT TEST BATCH 5

YEAR 11 CHEMISTRY 2021

NAME:		YEAR: (20 MARKS)	
	Duration: 1 Week	Due Date: 18/10/21	
Question 1			
What is an alloy ? Provide of	one example of an alloy.		
Definition:			(1 mark)
Example:			(1 mark)
Question 2			
Describe copper deficienc	y.		
			(2 marks)
Question 3			
From the following list, ch o	oose a metal(s) that is app	propriate for each use given	ven below.
Give reasons for your choi	ce.		
Aluminium	Lead	Copper	Duralumin
(i) Making a cooki	ng not		
			(1 mark)

(ii)	Making electrical wires.	
	Metal:	(1 mark)
	Reason:	_ (1 mark)
(iii)	Building an aeroplane .	
	Metal:	(1 mark)
	Reason:	_ (1 mark)
(iv)	Weights for fishing net .	
	Metal:	(1 mark)
	Reason:	_ (1 mark)
Question	<u>14</u>	
Name 2	non-metals.	
1		
2		(2 marks)
Question	<u>15</u>	
What is	plastic sulphur and explain how plastic sulphur is made.	
Definitio	n:	(1 mark)
Explana	tion:	
		(1 mark)
0 4		
Question	<u>1 6</u>	
Non-met	als oxides are acidic in nature because they react with water to form acidic solutions.	
U	sing the information given above complete the equation given below.	
S	$O_{3 (g)} + H_2O_{(l)} \rightarrow \underline{\qquad}_{(aq)}$	(1 mark)

	(1 mark)
Question 8	
Give the general formula for alkanes.	
	(1 mark)
Question 9	
Define fractional distillation.	
	(1 mark)

***THE END ***

YEAR 11 ECONOMICS WORKSHEET

HOME STUDY PACKAGE-5

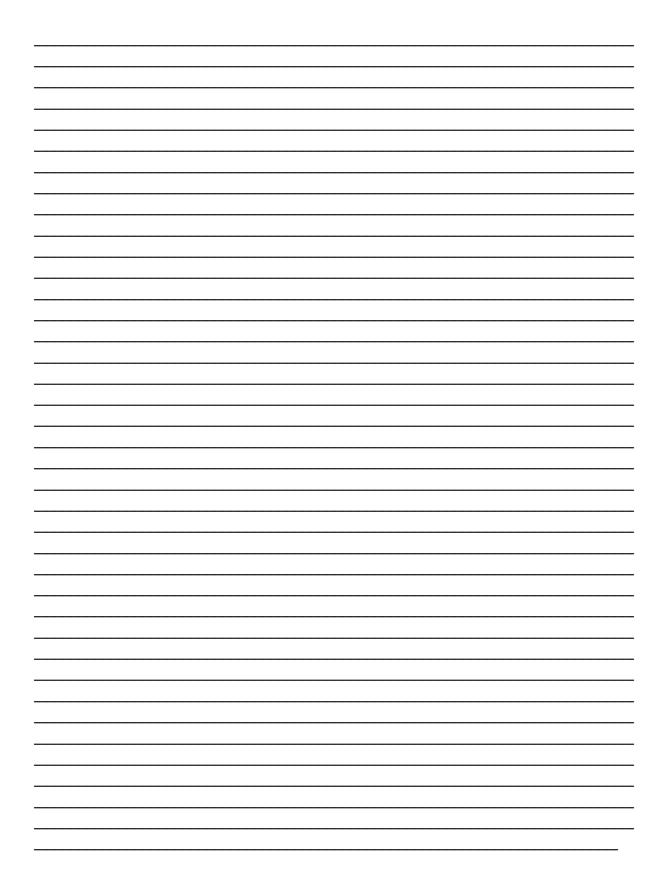
Vorksheet Number :1	Name of the Student:	
ue Date: 27 th September,2021	Year:	
1. Define Free trade.		
		(1mark)
2.State two advantages of free trade.		
		(2marks)
3.State two disadvantages of free trade.		
4. Define Protection.		
		(1

. State two reasons for protection	
	(2marks)
5. State two effects for protection	
	(2marks)
	(2marks)

YEAR 11 ECONOMICS WORKSHEET

HOME STUDY PACKAGE-5

<u> Worksheet Number :2</u>	Name of the Student:			
<u>Due Date</u> : 27 th September,2021	Year:			
Question				
"while developing countries like Fiji is en some form of protection".	njoying benefits from free trade , they also need			
With reference to the above statement, dis	scuss:			
 Three forms of protectionism. Three reasons in favour of protect Three arguments against protection countries. 	tionism. onism if Fiji is ever to compete with developed			



NAME:		
YEAR 11	_	

LABASA SANGAM (SKM) COLLEGE YEAR 11 GEOGRAPHY HOME STUDY PACKAGE TOPIC 4: VEGETATION

WEEK 10,11 &12 1. What is vegetation? **(10 Marks)** _____ (1 mark) 2. Differentiate between native plants and exotic plants with examples _____(2 marks) 3. List 4 important functions of vegetation in the ecosystem 4. Name 3 native trees and 3 exotic trees in Fiji 5. Name 3 factors that affect vegetation distribution 6. Name the 5 types of vegetation regions _____(1 mark)

...THE END...

NAME:		
YEAR 11		

LABASA SANGAM (SKM) COLLEGE YEAR 11 GEOGRAPHY HOME STUDY PACKAGE TOPIC 4: VEGETATION

WEEK 10 11 & 12

	WEEK 10,11 &12	(10%)
1. Disc	uss how the altitude and latitude affects vegetation distribution	
		(1 mark)
2. Expl	ain the relationship between precipitation and vegetation	
		(1 mark)
3. List	3 characteristics of a tropical rainforest	
		(2 marks)
4. Whe	ere will you find tundra forest? State one of its features	
		(2mark)
5. Nam	ne 3 characteristic of coniferous forest	
		(2 marks)
6. <u>Defi</u> a. Cano	nitions opy -	
		(1 mark)
b. Epip	hytes -	
		(1 mark)

THE END

LABASA SANGAM (SKM) COLLEGE HORT -TEST -2 -हिन्दी YEAR 11

<u>WEEK</u> -15	SHORT -TEST -2	-हिन्दी	· 	YEAR
१. . नीचे दिए वाक्यों का ! भी दीजिए	,	5 - १५) ध को पूरा	कीजिए उचित शीर्षक	
HOD 2409 14014	©©# &;© □	# # 	\$ \$ \$*0\$A\$ QDY, •D 5H\$ XQD■Q 5Q*1 D&D&D&D&D&	€; *
				-
				-
				-

केवल औ	पचारिक	प्रयोग के	लिए					
RI	I	С	S	G	P	P	S	
6	1	1	2	2	1	1	1	१५
								<u>सांस्कृतिक अध्ययन</u> NAMEYEAR
प्रश्न २ दिए गए प्रश्नों का जवाब को उत्तर –पुस्तिका पुरे वाक्यों में लिखिए								

₹.	संसार में	मनष्य को	मोक्ष की प्रा	प्ति कैसे मि	त्रता है ?	(अंक	٤)	
							· <i>)</i>	
४ स्वर्ग	[:] और नरक	पर चर्चा व	गिजिए ∣					
४ स्वर्ग	[:] और नरक 	पर चर्चा व	तीजिए 					
४ स्वर्ग 	[:] और नरक 	पर चर्चा ब 	तीजिए 					
८ स्वर्ग 	[:] और नरक 	पर चर्चा ब 	तीजिए 					
८ स्वर्ग 	और नरक 	पर चर्चा व 	तीजिए 					

YEAR 11 HISTORY ASSESSMENT - SHORT TEST

WORKSHEET 15

GOVERNMENT AND GOVERNANCE: UNIT 1-6

SECTION A: RESOURCE INTERPRETATION

(20 Marks)

Use your knowledge of the topic to answer the questions that follow. Each question is worth two marks each. Use the **Four Resources** and your knowledge to answer the questions that are given. Write 1-3 sentences.

Resource I (6 marks)

The co-existence of the administration systems started all the way back during the colonial period and continues into the present period. Sir Arthur Gordon was trying to preserve the *i-Taukei* way of life through indirect rule and at the same time slowly introducing the Parliamentary system. This dual administration allowed the British to rule Fiji without interfering so much with the traditional leadership structure.

Source: Government and Governance, Ministry of Education, 2012

i.	Name one of the two systems that co-existed in Fiji from 1886 to 2006.	(2 marks)	

Descri	be the role of the Great Council of Chiefs in this Dual Adminis	stration. ((2 m
Explai	n a way in which the dual administration preserved traditional	leadership	stru
			2 m

Resource II (6 marks)



Name the piece of paper that the voter is putting inside the box?		
State a reason why is it important to have an Officer supervising the voters.	(2 mark	

	/-
by voting takes place in an enclosed area.	(2 m
	hy voting takes place in an enclosed area.

Resource III (6 marks)



Source: Government and Governance, Ministry of Education, 2012

tate a kind of presentation lawyers would do in the Court Room	(2 mark)
Define the term client in relation to a trial process	(2 marks)
Define the term client in relation to a trial process.	(2 marks)
Explain the significance of research before the trials for lawyers.	(2 marks)

Resource IV (2 marks)

A year after the election, Dr Ahmed Ali concluded that "the 1972 General Election confirms the past pattern of political behavior". (Ali, *Journal of Pacific History*, 1973, p.180) Communal loyalty was strong and each community remembered the struggles over the 1960 sugar strike and the bitter debates in the 1960s over a proposed common roll of voters. The Alliance continued to support the policies of the former British rulers and its supporters dominated the Great Council of Chiefs. Dr Ali concluded that this situation was unlikely to change.

Source: Government and Governance, Ministry of Education, 2012.

Explain a reas	on why Dr. Ali's prediction in the last sentence is inaccurate. (1 mark)
Explain a reas	on why Dr. Ali's prediction in the last sentence is inaccurate. (1 mark)
Explain a reas	on why Dr. Ali's prediction in the last sentence is inaccurate. (1 mark)
Explain a reas	on why Dr. Ali's prediction in the last sentence is inaccurate. (1 mark)

LABASA SANGAM (SKM) COLLEGE

HOME ECONOMICS

Name:	Year: 11	
TOTAL MARKS: 10	WEIGHTING :5 %	
4. For further enquires, do not he	. •	
1. Name any <u>two</u> types of fasteners		
2. Define the term <u>Fasteners</u>	(1 mark)	
2. State two points to consider when sal	(1 mark)	
3. State <u>two</u> points to consider when sel (i)		
(ii)		
	(2 marks	
4. State two tips on how to take care of	-	
(i)		

(ii)	
	(2 marks)
5. A nylon fastener consists of two parts. Name those parts.	
(i) (ii)	
	(1 mark)
6. Explain any <u>three</u> rules for sewing on buttons.(i)	
(ii)	
(iii)	
	(3 marks)
WORKSHEET 14	
1. Explain the purpose of a shank.	
	(1 mark)
2. Identify and explain the techniques shown below	
* * * *	

(ii)			
(iii)	LA PO		

(6 marks)

- 3. Name the **three** types of seams
- (i) _____
- (ii)
- (iii)

(3 marks)

SHORT TEST HOME ECONOMICS

Name:	Year: 11		
TOTAL MARKS: 20	WEIGHTING :20 %		
 NOTE: Write all your answers in the space provide You may use your text book for reference. Return the completed worksheet on the 18 and 15 For further enquires, do not hesitate to ask This open book test is based on Strand 3 – Explain the function of a care label. 	TH of October 2021 with Worksheets 13-k me and write your name on every page.		
 Write any <u>three</u> methods of straightening th 	(1 mark) ne fabric		
(i)			
(ii)			
(iii)			
3. Explain the function of mordant in tie dyeing and	(3 marks) d give an example of mordant.		
	(1 mark)		

4. State the function of the following parts of a sewing machine.	
i) Bobbin winder	
ii) Feed dog	
	(2 marks)
5. Identify the \underline{two} traditional Fijian artefacts that are still prepared by the I-	Taukei.
(i)	
(ii)	
	(2 marks)
6. State the use of the following types of sewing machines: (i) Over locker	
(ii) Treadle sewing machine	(1 mark)
	(1 mark)
6. Explain the function of a buttonholer.	
	(1 mark)
7. Study the picture below and answer the following questions. Source: Year 11Home Economics Textbook (i) Identify the type of knitting illustrated in the picture.	

(1 mark)

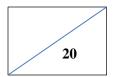
(ii) State <u>two</u> properties of knitted fabrics that make it a popular wear.
1
2
(2 marks
8. Sewing machines need regular oiling. (2 marks
(i) Explain the purpose of oiling sewing machines.
(1 mark)
(ii) Why is it important to run the machine after oiling on scraps of material prior to the actual
sewing?
(1 mark)
9. Alterations have been made to the sleeve pattern shown below.
Source: Year 11Home Economics Textbook
(i) Describe the procedure used in altering the sleeve pattern above.
(2 marks)
(c) French seams are considered to be strong seams.
Name one garment where the French seam is most useful.
(1 mark)

NAME:	
YEAR 11:	

YEAR 11 MATHEMATICS LIFE SKILLS

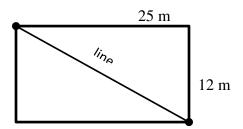
SHORT TEST (WEEK 15)

STRAND 4: Trigonometry in Everyday Context



(TIME ALLOWED: 45 MINUTES)

1. A clothes line is to be hung across a garden shown below. How long should it be?

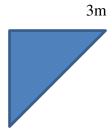


(1 mark)

2. A ramp is 4m long with a horizontal base of 2m. What is the height of the ramp?

(1 mark)

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4	Λ cords	n 10 1n	o chona	ot a mont	anala trianala
J.	\mathbf{A}	711 IS III	a snanc	\mathbf{o}	angle triangle.
	500-00			01 01 11 5110	



a) Find the perimeter of the garden.

(1 mark)

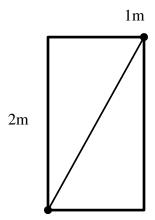
b) If posts are placed 1 m for fencing the garden, how many posts will be needed?

(1 mark)

4. A cyclist travels 15km due north and then 18 km due east. How far is she from the starting point?

(1 mark)

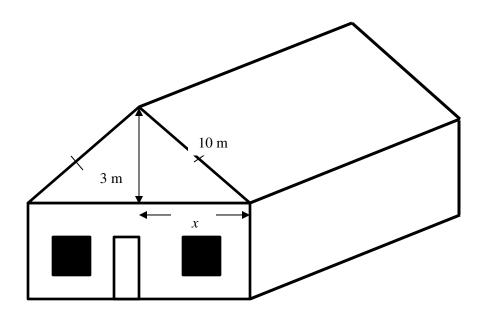
5. A diagonal brace is made for a door frame 2m by 1m. What is the length of the brace?



6. A boat sails 2 km South and then 4 km east. How far is the boat from the starting point?

(1 mark)

7. The following is a building sketch of single-storey house

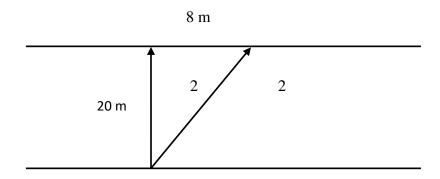


a) Find x

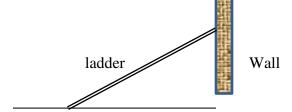
b) What is the width of the house?

(1 mark)

8. A swimmer starts to cross a 20m wide river. The current carries her 8m downstream from the original landing place. How much further has she had to swim than the width of the river?



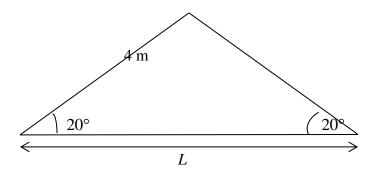
9. A 5m ladder is leaning against a wall. The foot of the ladder is 3 m from the base of the wall.



What angle does the ladder make with the ground?

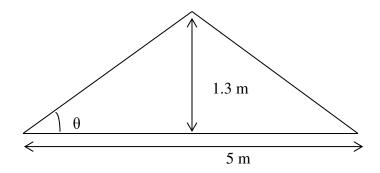
(1 mark)

10. Determine the length of the roofing beam, l, required to support a roof of pitch 20° as shown in the diagram.



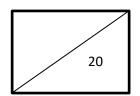
11.	The top of a tree, when viewed 20 m from the base of the tree, has an angle of elevation of
	45 °. Find the height of the tree.
	(1 mark)
12.	A tree 6m high casts a shadow 4m long. What angle do the sun's rays make with the
	ground?
	(1 mark)

13. Calculate the angle of pitch (θ) of a roof truss 5m wide and 1.3 m high



(3 marks)

The End

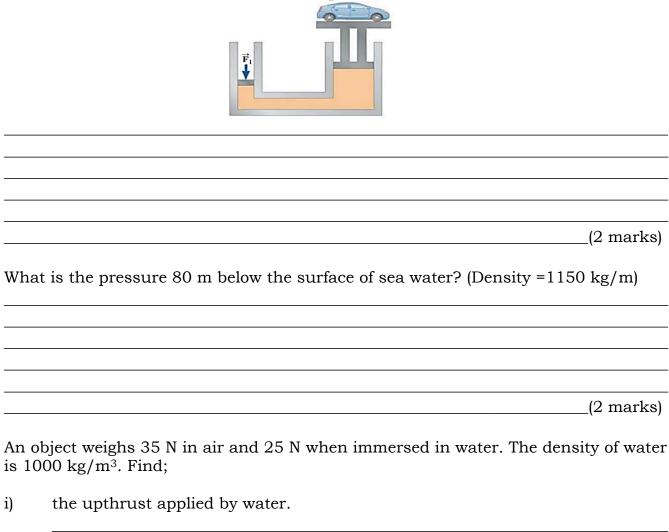


Name:	
Year:	

LABASA SANGAM (SKM) COLLEGE HOME STUDY PACKAGE YEAR 11 PHYSICS SHORT TEST 2

	SHORT TEST 2										
Pho	otovoltaic energy is the conversion of sunlight into										
A.	chemical energy										
В.	biogas										
C.	electricity										
D.	Geothermal energy	(1 mark)									
A moving object always possesses											
A.	potential energy										
B.	thermal energy										
C.	kinetic energy										
D.	magnetic energy	(1 mark)									
	What is the purpose of having cylindrical water towers above ground or water tanks at the top of buildings?										
A.	To increase the height, hence increasing the water pressure in hor	nes.									
В.	To increase the volume of water, thereby increasing the water preshomes.	ssure in									
C.	To displace water so less water is placed behind large dams in rese	ervoirs.									
D.	To store water for use by consumers.	(1 mark)									
The	e temperature of a solid body is defined as the										
A.	Thermal energy required to increase the body's temperature by on	e degree									
B.	Maximum thermal energy that must be supplied to meet the solid										
C.	Total kinetic and potential energy of the solid's molecules										
D.	Average kinetic energy of the solid's molecules	(1 mark)									
Sta	te the law of conservation of energy.										
		(1 mark)									
		(1 1110111)									

The small piston of a hydraulic lift has a cross-sectional area of 0.005 m², and its 6. large piston has a cross-sectional area of 0.04 m². What downward force must be applied to the small piston for the lift to raise a load of 15 kN?



(1 mark)

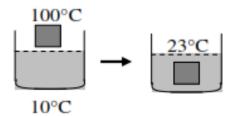
(1 m
·
(1 m
(1

7.

8.

is 1000 kg/m^3 . Find;

9. A piece of aluminium of mass 0.400 kg at 100 $^{\circ}$ C is lowered into a 0.500 kg of water at 10 $^{\circ}$ C. The resulting temperature of the mixture is 23 $^{\circ}$ C. Assume that there are no heat losses. Specific heat capacity of water is 4200 J/kg/ $^{\circ}$ C.



i)	heat gained by water.									
	(1 mark)									
ii)	specific heat capacity of aluminium.									
	(2 marks)									
Expla	ain the use of a compressor in a refrigerator.									
Differ										
	(2 marks)									
	specific latent heat of fusion of ice is 336 000 Jkg ⁻¹ . What is the quantity of heat red to melt 3.5 kg of ice at 0 °C?									
	(1 mark)									

SHORT TEST-2

(4 marks)

(3 marks)

(5 marks)

Year/Level:11C/D/E Due Date:18th October 2021 Date:13th October 2021

School: Labasa Sangam(SKM) College Subject: Technical drawing Week:15/worksheet:1							
QUESTION:1	Design	(20 marks)					
Problem:							
School children find it difficult to study when their	homes are small or overcrowd	ed.					
Brief:							
Design an OUTDOOR STUDY TABLE to be us	ed by school children at home.						
Specification:							
The OUTDOOR STUDY TABLE should:							
(a) Be portable and folded for easy storage.							
(b) Have two seats fixed together with the frame w	hile sitting.						
(c) Accommodate at least 6 people.							
(d) Be made from a combination of an appropriate	metal, wood and plastic.						
Requirements:							
(a) Produce two freehand pictorial sketches of the	OUTDOOR STUDY TABLE	(8 marks)					
(b) Evaluate each sketch on the following criteria:							

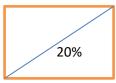
(c) Explain with the help of sketches how the parts are assembled.

(d) Draw a pencil-rendered or a colour-rendered pictorial sketch of the final solution.

(i) materials used

(ii) Safety

NAME: _	
YEAR: _	



DESIGN-SOLUTION TEMPLATE

20%

QUESTION:1

[20 marks]

(a)	Possible	Solution 1		(4 marks)) P	ossible So	ution 2			(4 marks) (c)										(3	marks)
												Overall neatness at clarity of sketch (e Relevant explanati and labels given	s)	1	3	Evidence show	1						
											(6	1)										(5	marks)
Pictorial 1 Crate/Box	x used	3	Correct labels	1	1	Pictorial Crate/Box us	ed 1	3	Correct labels	1													
Correct li 2 work	ne 1	4	Correct proportion	1	2	Correct line work	1	4	Correct proportion	1													
(b)	Criteria	Possib	ole Solution 1		(2 ma	ırks)	Possible	Solution	n 2	(2 mark	s)												
(i) M	[
(1) M	laterials																						
(ii) S	trength																						
												1											_
												Overall neatness ar clarity of sketch Correct labels	nd	1	3	Correct rendering shown Correct proportion	1		5	Correct line work	1		
		1				- 1					- 11 -)			4	proportion	-	1	1				