

CATHOLIC DIOCESE OF MOSHI

URU SECODARY SCHOOL

PHYSICS

TOPIC: OPTICAL INSTUMENTS

A. The lens Camera

QUESTIONS

1. Describe the structure of the LENS CAMERA (This includes all essential parts of lens Camera and its good diagram)
2. Describe the mode of action of a lens camera (How a lens camera work)

B. THE HUMAN EYE

1. Describe the structure of the human Eye(This includes all essential parts its functions and well labeled diagram of the Human Eye)

C. Mode of action of the human Eye

1. Explain in brief on how the human Eye work

D. POWER OF ACCOMODATION OF AN EYE

Explain the meaning of accommodation power of human eye

BIOLOGY

Exercise

1. a) Explain the general feature of the kingdom Plantae.
b) By using diagrams, state five distinctive features between class monocotyledonae and dicotyledonae
2. A) Explain the general functions of the skeleton.

b) Draw a labeled structure of along bone
3. A) List down the steps involved image formation in the eye
B). Explain the mechanism of hearing
4. (i) What is a reflex action?
(ii) Give four (4) examples of reflex actions.
(iii) Explain the importance of reflex action to animals.
5. A) State two (2) differences between Nervous control and hormonal control.
b) Why a person manages to climb a big tree when suddenly see a big lion.

ENGLISH LANGUAGE

Exercise

Attempt all questions.

- Put the verbs in brackets in the right form by writing the correct forms according to the nature of the sentences given.
 - Maganga Twenty cows by next year. (self)
 - I To solve this sum since yesterday. (try)
 - It they here I would speak to them (be)
 - She..... As regularly. (visit)
 - Ruthher grandfather in a week's time (visit)
- Supply the appropriate preposition to complete the following sentences.
 - We viewed the game The television.
 - I am no longer interested Sports now days.
 - Why don't you come 02:30 pm tomorrow?
 - The factory workers went strike last week.
 - I have been awake two hours now
- In literary works the titles enable to understand the messages the writer wants to convey. Verify this statement using the novel "Passed like a Shadow " (write four (4) points.)

CHEMISTRY

Exercise

- Write ionic equation of the following chemical equation
 - $\text{K}_2\text{SO}_4(\text{aq}) + \text{BaCl}_2(\text{aq}) \longrightarrow 2\text{KCl}(\text{aq}) + \text{BaSO}_4(\text{s})$
 - $\text{CaCO}_3(\text{s}) + 2\text{HCl}(\text{aq}) \longrightarrow \text{CaCl}_2(\text{aq}) + \text{H}_2\text{O}(\text{l}) + \text{CO}_2(\text{aq})$
- Why do we treat water?
 - Explain three ways by which water can be purified at home
 - With the aid of chemical equations explain two tests for water
- What is lime scale?
 - How does limescale form?

- c) Why is there more lime scale on hot water taps?
- 4. With one example in each explain five types of a chemical reaction
- 5. a) Distinguish between temporary and permanent hardness of water
 - b) Name the ions that cause
 - i. Temporary hardness of water
 - ii. Permanent hardness of water
- c) Why permanent hardness of water cannot be removed by boiling?

LITERATURE IN ENGLISH

Exercise

Answer all questions

1. Give the difference between oral literature and written literature (five points)
2. (a) give the meaning of
 - i. Literary Language
 - ii. Ordinary Language
 (b) Outline the criteria to be considered when differentiating literary language from ordinary language
3. Write short notes on the following

| | |
|----------------|--------------|
| i. Paradox | iv. Metaphor |
| ii. Literature | v. Barbarism |
| iii. Metonym | |
4. Write short notes on

| | |
|--------------------|---------------------------|
| i. Novel | v. Autography |
| ii. A Novella | vi. Essay |
| iii. A Short Story | vii. Informative Articles |
| iv. Biography | |
5. Explain the features of poetry
6. Elaborate the features of dram/play

KISWAHILI

Zoezi

1. Unganish asentensi zifuatazo kwa kutumia O rejeshi.
 - i. Wanamichezo wameanza mazoezi. Wanamichezo watacheza kesho.
 - ii. Kitabu kinasomwa kila siku. Kitabu kinachakaa haraka.
 - iii. Nyimbo zimeimbwa jukwaani. Nyimbo zimefurahisha.
 - iv. Kazi zilipangwa. Kazi zitafanyika.
 - v. Ufunguo umepotea. Ufunguo umepatikana chumbani.
2. Taja vipashio vinavyounda kiima kwa mifano
3. Andika nomino tano za ngeli U-Zi na kwa kila moja tunga sentensi ya umoja na wingi.
4. Fafanua mambo manne yaliosaidia kukua na kuenea kwa lugha ya Kiswahili baada ya uhuru.
5. "Wahusika wakuu ni nguzo katika kufikisha ujumbe kwa jamii iliyokusudiwa" fafanua kauli hiyo kwa kutumia hoja tatu kwa kila mhusika kutoka tamthilia mbili ulizosoma.

INFORMATION AND COMPUTER STUDIES (ICS)

Exercise

1. (a) Define the term information
(b) Mention and explain two sources of information
2. Analyse five importance of information in daily life
3. Write the long form of the following terms as used in Internet
 - (a) FTP
 - (b) HTML
 - (c) HTTP
 - (d) SMTP
 - (e) NNTP
4. Explain four effects of disposing electronic equipment's to the environment

GEOGRAPHY

Exercise

1. What do you understand by the term photograph?
2. Identify and describe three types of photograph
3. Mention characteristics of each type of photograph (four each type)

4. Mention six differences between ground, oblique and vertical photograph
5. What are the similarities and differences between maps and photograph
6. Explain seven value of photograph in our daily life.
7. Explain the term photograph interpretation
8. Describe five factors that affect photograph interpretation
9. Study the photograph below and answer the question that follow



- (a) Suggest the type of photograph
- (b) What can you observe from the photograph?
- (c) Suggest the possible area where the photograph were taken in Tanzania
- (d) Comment the scale of production and its features (three features)

CIVICS

Exercise

1. In order for any country to develop economically, different factors are required.
Identify seven factors for economic development
2. In Tanzania there are different financial institutions. To what extent the institutions contribute to economic development of our country? Give six ways
3. What are the roles of the Government in economic development of Tanzania?

HISTORY

Exercise

1. With examples why some African resistances failed. Give seven reasons
2. There were different reactions of Africans towards colonial invasion in early 19th century. What were the factors determined the nature of the reactions? Give six points with examples
3. Company rules were effectively involved in the process of establishing colonial rule although eventually they failed. What were the reasons for their failure? Give eight points

BASIC MATHEMATICS

Exercise

1. (a) If $\tan A = 22/5$ where A is an acute angle, find (i) and (ii)

(b) A building has an angle of elevation of 35° from a point P and an angle of elevation of 45° from point Q. If the distance between point's p and Q is 30cm, what is the height of the building? (Write your answer correct to two decimal places)
2. (a) Solve for x given $4x + 16 = 5(2x + 1)$

(b) Determine the domain and the range of the function $f : x$

(c) A function is defined by $f(x) = x^2 + 6$ and $g(x)$ is another function of x such that $g(x) =$

Find $g(-4)$
3. (a) A roll of string is 13.5metres long. Pieces of string of length 2.30m, 1.8m, 2.37m and 0.95m are cut off. The remaining part is divided into equal pieces of length 32cm. How many equal pieces are there?

(b) By completing the square find the exact value of P, Q and R if $4x^2 - 16x + 30 = P(x + Q)^2 + R$

(c) Solve the following $-6|2x - 3| - 42$ and give the solution on the sketch graph
4. (a) P and Q are finite sets such that $n(P \cap Q) = 15$, $n(P \cup Q) = 90$ and $n(P) = 30$. Without using Venn diagrams, find (i) $n(P)$ and (ii) $n(Q)$.

(b) In a Certain mid-term examination 72 candidates offered mathematics, 64 offered English and 62 offered French, 18 offered both Mathematics and English, 24 Mathematics and French, 20 English and French and 8 candidates were offered all three subjects. How many Candidates were in the examination?

5. (a) The $\triangle ABC \sim \triangle PQR$ and $AB = 6\text{cm}$ while $PQ = 8\text{cm}$. Find the area of $\triangle ABC$ if that of $\triangle PQR$ is 64cm^2 .

(b) The function f is defined by $f : x \rightarrow ax + b$, for $x \in \mathbb{R}$, where “a” and “b” are constants. It is given that $f(2) = 1$, and $f(5) = 7$:-

(i) Find the values of “a” and “b”. (ii) Solve the equation $f(x) = 0$

(c) A point (x, y) is rotated through 90° and then reflected about the line $y = x$. Find the image of the point $(3, 6)$ under this double transformation.

COMMERCE

Exercise

1. Inflation is one of the factor which lead to the decline of the economy in the country. The government through the central bank plays important role to overcome inflation in our country. Discuss this statement with not less than eight evidence.

2. Improvement of science and technology has lead sharing of information to be conducted electronically, discuss six tools which are used to communicate electronically.

3. Agents are very important people in the process of buying and selling of goods. As a business students, briefly explain any six types of agents you know.

BOOK KEEPING

Exercise

1. Outline any five accounting principles

2. Given the following transactions;

a) Goods sold to Amin tsh 2000 was recorded in error to Amina

b) Sales over casted by 1000

c) Rent under casted by 3500

d) Sold machinery tsh 1500, but recorded in error to sales account.

Note; Difference in trial balance 4500

Required

a) Journal entry

b) Suspense account

3. Outline any five sources of fund for non-profit organization.

4. Uru school car was bought for tsh 2,000,000/= on 1st January 2015 and expected to last for four years.

Required

By using some of the years digits open;

a) Car account

c) Profit and loss account

b) Provision for depreciation account

d) Balance sheet

5. Why do we prepare single entry account?? Give five reasons.