

2.4 COMPETENCY AND SKILL DEVELOPMENT

1. Library work
2. Field exploration
3. Hands- on activity
4. Preparation of term paper
5. Identifying and using the different sources for st



1. Library work

JESUS TRAINING COLLEGE, MALA (Affiliated to the University of Calicut)



2022-2024 Batch

EPC/Practical/Task: EPC 01 - EPC 07. Reading and Reflecting on texts

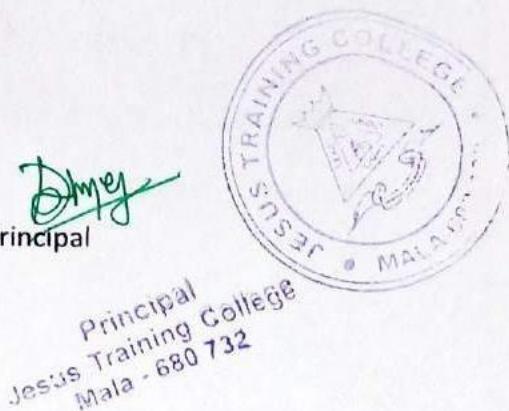
Semester : I

Name : Abiya Parasad (Natural Science)

Register No : STA1W17NU5001

Zera
Class teacher

Dimey
Principal



Place : MALA

Date : 9-1-2023

EPC

TASK - 001

Submitted To,

Sisna A.S

Assistant Professor

Jesus Training College, Mala

Submitted by,

Abiya Prasad

Natural Science.

Submitted on : 03 - 01 - 2023

Sisna

ACTIVITY - I

A list of terminologies in English and local language of a subject textbook.

STANDARD IX

PROTECTORS OF BIOSPHERE

ജീവനാധനങ്ങൾക്ക് സംരക്ഷകൾ

Plants	- സസ്യങ്ങൾ
Photosynthesis	- പ്രകാശസംടേഷണം
Chlorophyll	- ഹരിതകം
Epidermis	- ഉപരിപുൽ
Stomata	- അസ്യറ്റോഡുൾ
Plant Cell	- സസ്യകോഡം
Double membrane	- ഇരുപാളികളുള്ള സ്ക്രാം
Chloroplast	- ഹരിതകാഡം
Pigments	- വർണ്ണക്കോഡൾ
Light Phase	- പ്രകാശഫൈസ്
Dark Phase	- ഇരുപ്പഫൈസ്
Chemosynthesis	- രാസസംടേഷണം.
Animals	- ജീജീകൾ
Ecosystem	- അവാസവ്യവസ്ഥ
Phytoplankton	- സസ്താവക്കോഡൾ
Biodiversity	- ഒരുവാദവവിധ്യം.
Biosphere	- ജീവനാധനം.
Mangrove forest	- കണ്ണടവനം .

A

SAMAGRA SHIKSHA, KERALA
SECOND TERM EVALUATION 2022-23
BIOLOGY

STD- IX**Time : 1 $\frac{1}{2}$, hrs.****Total Score : 40****Instructions:**

- 15 minutes is given as cool off time. This time is to be used for reading the question paper
- Attempt the questions according to the instructions.
- Keep in mind the score and time while answering the questions.

(Answer any 5 from questions 1-6. One score each.)

(5 x 1 = 5)

- 1 Choose the condition in which accumulation of fat occurs in the arterial walls. (1)
 - Emphysema
 - Atherosclerosis
 - Bronchitis
 - Hypertension
- 2 Choose the correct pair from the following (1)
 - Pelvis-region where urine from the filters flows into
 - Afferent vessel-The blood vessel that comes out of Bowmann's capsule
 - Cortex-The dark coloured inner part of the kidney
 - Medulla -The light coloured outer part of the kidney
- 3 Identify the processes in which carbon dioxide is not formed as a bi-product (Lactic acid fermentation, alcoholic fermentation, krebs cycle, glycolysis) (1)
- 4 Identify the muscle indicated as X in the illustration (1)

Inspiration	
(X) Contracts	→ Ribs raise

- 5 Identify the word relation and fill in the blank. (1)

Systolic pressure : 120mm Hg
 _____ : 80mm Hg

✓

ACTIVITY - II

Analyse a question paper of an examination and prepare a list of usages for different types and levels of test items

List of Usages

Choose

Identify

Write

Analyze

Observe

Prepare

Redraw

Complete

Give reason.

The biology question paper of 9th class held on 21st December 2022 is attached here. The question paper includes 23 questions. Students have to answer any 5 questions from the first 6 questions and each carries one score. From questions 7-13, students should answer any 6 questions. Here each question carries 2 marks.

Questions from 14-20 carries 3 scores each and students have to write answers for any 5 questions. From questions 21-23, students have to answer any 2 questions and each question has 4 marks. Hence the question paper contains 6 one mark questions, 7 two mark questions, 7 three mark questions and 3 four mark questions.

ACTIVITY - III

Make a comparative analysis of structure of presentation and specific language used in an article/ seminar / debate/ workshop etc. and prepare a report.

AIR BUBBLES IN DELHI'S DYSTOPIA

The article named 'Air Bubbles in Delhi's Dystopia' published in the Hindu newspaper by Nikhil M Babu and Jacob Koshy speaks about the air pollution in Delhi, particularly during the winter season. The article begins with a comparison of two scenarios, the life of two children studying in an international school and government school respectively. The life of these two children in the school is depicted like a story. The main idea behind is that the international school has a high quality indoor air purification system whereas the government school lacks such a system. Many private schools in Delhi have centralised air purification systems.

The article presents the severity of pollution in Delhi by using examples from different life situations. The language used in the article is simple. The use of keywords is very much limited. The author has made a great effort to point out how air pollution affects people starting from a school going child, to a climber who used to climb outdoor have switched to indoor climbing places which offers purified air free from contaminants. The article makes a comparison

EPC

TASK-02

INTRODUCTION

As a part of EPC task on 'Language across curriculums- Reading and reflecting on texts' of our two year B.Ed curriculum we had to observe two subject classes of secondary schools and record the discipline based language, teacher language and student language and make a comparative analysis. For this, a class in Biology subject and Malayalam subject was observed.

Discipline specific terminologies are one of the nature of academic discipline. Terminology means a set of words, which may be technical in nature or expressions which may be particular in nature in the context of any particular discipline. Different types of terminologies are used in different subjects and disciplines. It is useful for the understanding of underlying concepts ; it is just the means of communication of knowledge. Discipline specific terminology may be one of the identification marks of a discipline.

Comparison of discipline based language, teacher language and student language of two different subjects helps to understand the methods and ways of dealing various subject. Differences in method of instruction were also understood.

COMPARATIVE ANALYSIS

Since Biology is a Science subject and Malayalam an art subject, a very clear distinction was able to understand on the method of teaching both the subjects.

Both teachers tried to explain the subject matter in a simple and effective way. Both classes were interactive in nature. Students actively involved in the learning process. A free and conducive learning environment was created for the students. Both teachers tried to keep the learning process in fun and interesting ways. Teachers collected extra information from reference books and presented before the class. Blackboard was used appropriately and teacher gestures, movements and sound modulations helped to grab the attention of students.

In Biology class, appropriate pictures and videos relating to the topic were presented with the help of ICT facilities. Science class helped to improve the logical and critical thinking of the students. Meanwhile, the Malayalam class, focussed on improving the language related skills of students. It stimulates creativity and imagination.

EPC

TASK-()3

Submitted to,
Sisna A.S
Assistant Professor
Jesus Training College, Mala

Submitted by,
Abiya Prasad
Natural Science.

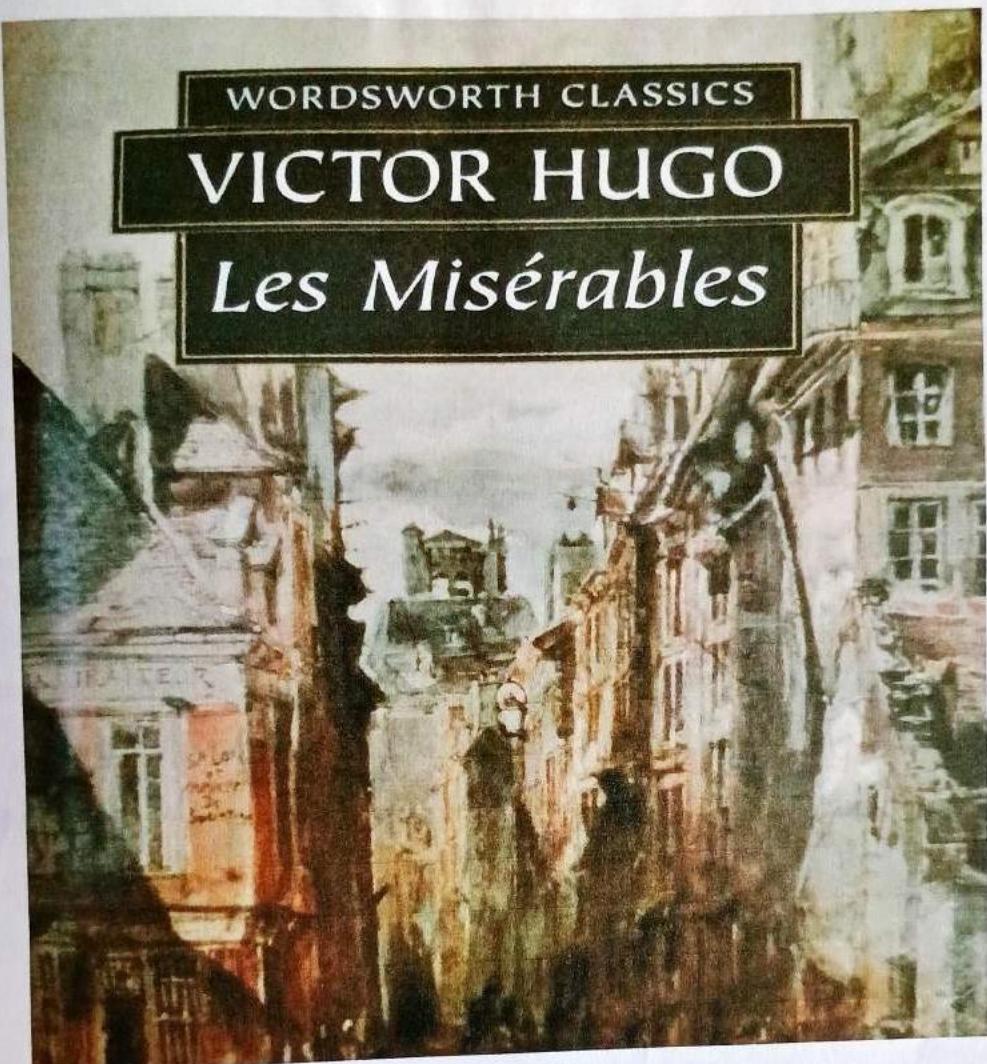
Submitted on : 18-11-2022.

Sisna

WORDSWORTH CLASSICS

VICTOR HUGO

Les Misérables



INTRODUCTION

Les Misérables is a novel by Victor Hugo, published in 1862. The title is French, translating in English to The Wretched ones. The story follows several characters through early to mid nineteenth century France as they seek redemption for their sins and an escape from poverty. It was an instant popular success and was quickly translated into several languages. Set in the Parisian underworld and plotted like a detective story, the work follows the fortunes of the convict Jean Valjean, a victim of society who has been imprisoned for 19 years for stealing a loaf of bread. A hardened and streetwise criminal upon his release, he eventually softens and reforms, becoming a successful industrialist and mayor of a northern town. Despite this, he is haunted by an impulsive, regretted former crime and is pursued relentlessly, by the police inspector Javert. Valjean eventually gives himself up for the sake of his adopted daughter, Cosette, and her husband, Marius. Les Misérables presents a vast panorama of Parisian society and its underworld, and it contains many famous episodes and passages.

EPC

TASK-004

Submitted to,

Sisha A.S

Assistant Professor

Jesus Training College, Mala

Submitted by,

Abiya Prasad

Natural Science.

Submitted on: 05-12-2022

Sisha

INTRODUCTION

Economic Zoology is a book on the economic aspects of zoology by G.S. Shukla and V.B. Upadhyay, whose fourth revised and enlarged edition was published in 2000. This book contains all available information on useful as well as harmful animals. Economic zoology is a sort of applied zoology, which involves the study of animals or living organisms that are of benefit or those that cause harm to humans.

Since time immemorial human beings have always been looking towards other living animals, to use them as food, shelter, and for other agricultural purposes. Some animals are very useful to mankind while others cause great loss to the economy of man. Though everyone has its own importance in nature but a few of them, such as some mammals, birds, fishes, prawns, and insects (silkworm, honeybee, lac insect) in the modern era of technology are gaining too much importance. Some, pests are competitors of human beings for natural resources, for food and other purposes. So, the study of the economy of animals could be much fruitful for mankind.

MAJOR CONCEPTS

PARASITIC PROTOZOA AND HUMAN DISEASES

A parasite is an organism that lives on or in a host organism and gets its food from or at the expense of its host. Malaria is the most significant of the protozoan parasites that infect human.

PHYTOPARASITIC NEMATODES AND THEIR CONTROL

Most phytoparasitic nematode species are soil dwelling pests and feed from the roots of a host plant. Rotating crops is a good way to control nematodes. Chemical controls include fumigants and nervous system toxins.

ZOOPARASITIC HELMINTHES AND CONTROL

These parasites have a significant impact on host ecology and play important role in regulation of host population and have zoonotic potential as well. So their control is essential.

MITES AND TICKS AND CONTROL

Mites inhabit most ecological settings. The relatively few species parasitic on humans and some produce allergic reactions. In the U.S. ticks, unlike mites, transmit many serious diseases. So their control is essential.

ECONOMIC ZOOLOGY



SHUKLA . UPADHYAY

EF'C

TASK-05

Submitted to,

Sisna A.S

Assistant Professor

Jesus Training College, Mala

Submitted by,

Abiya Prasad

Natural Science.

Sisna

Submitted on :09-12-2022

A higher number of promotions, but lower learning outcome

SC/ST students have been impacted disproportionately by the pandemic as their learning outcomes have declined the most

DATA POINT

Shilpa Nhalani, Rebecca Rose Singh & Vignesh Shakthikan

Higher education in India is entering a worrying phase due to the unpreceded impact of COVID-19 on school education. On the one hand, with policies mandating the promotion of students, promotion at the secondary school level significantly and repetitions nosedived during the pandemic years (2020-21 and 2021-22). On the other, the inability to attend physical school and the lack access to digital education caused a massive drop in learning levels after the COVID-19 outbreak, especially compared to students in the pre-COVID-19 years, as students were promoted in secondary to higher secondary school and graduated from school to college during the pandemic years even though their learning outcomes were poor. This significant as even in the pre-COVID-19 era, the employability of engineers had been reducing fast due to the poor quality of education and the lack of conceptual understanding.

Unified District Information System for Education (UDISE) survey for 2021-22 shows the promotion rate among secondary school students continued to increase even during the academic years. Chart 1 shows promotion rate of secondary school students across communities.

Notably, the promotion rate among Scheduled Caste (SC) and Scheduled Tribe (ST) students increased sharply after the outbreak. The promotion rate among Backward Classes (OBC) students continued to rise unabated. Chart 2 shows the repetition rate of secondary school students across communities. The repetition rates too drastically came down in the pandemic years with

some 1% students repeating their class across all communities. Notably, the gap in the repetition rate between SC/ST students and general category students declined greatly after the outbreak.

While the promotion rate surged and the repetition rate declined, the marks scored by school students in National Achievement Survey (NAS) exams dropped significantly across classes and in most subjects. NAS exams were conducted in November 2021 across select schools. Similar tests were conducted in 2017/2018. Chart 3 shows the difference between the mean score in 2021 compared to the score in 2017/2018 among Class VIII and X students (SC/ST/OBC and general category) in various subjects. For instance, in the Class X Science exam, the score of general category students dropped by 34 marks, while that of SC, ST and OBC students declined by 45, 48 and 40 marks, respectively. So, there will be a disproportionately greater impact on SC and ST students as their learning outcomes reduced the most while their promotion rates saw the highest degree of rise among all the communities.

Chart 4 shows the dropout rate of secondary school students across communities. Despite reports such as a UNICEF poll and an Annual Status of Education Report (ASER) survey pointing out that dropout rates increased in India during the outbreak, UDISE data do not reflect this drop.

Table 5 shows the percentage of children not enrolled in school across age groups in 2018, 2020 and 2021, according to the ASER survey. ASER showed that except in the 15-16 age group, the share of children who were "not enrolled" in schools in 2020 and 2021 compared to 2018 increased in every other age group. However, the UDISE shows an increase in enrolment rate across all levels of education (Table 6). This contradiction in data necessitates further scrutiny of the UDISE data.

Mind the knowledge gap

The data for charts 1, 2, 4 and table 6 were sourced from UDISE reports between 2016-17 and 2021-22. Table 5 was sourced from ASER and chart 3 was sourced from National Achievement Survey 2021 and 2017-18.



Chart 1 | Promotion rate of secondary school students

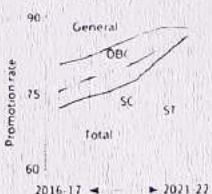


Chart 4 | The graph shows the dropout rate of secondary school students across communities

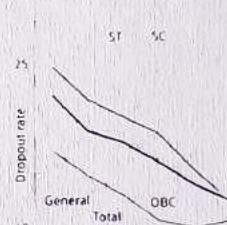


Table 5 | Share of children not enrolled in schools across age groups in 2018, 2020 and 2021, according to ASER

Age groups	Not enrolled in 2018	Not enrolled in 2020	Not enrolled in 2021
Age 6-14	2.5%	4.6%	4
Age 7-16	3.9%	5.2%	4
Age 7-10	1.4%	4.4%	4
Age 11-14	3.2%	3.9%	4
Age 15-16	12.1%	9.9%	6

ASER 2021 was conducted in 25 States and Union Territories. A total of 75,234 children in the age groups 6-16 years were covered by the survey.

Chart 2 | Repetition rate of secondary school students

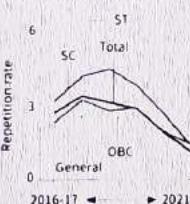


Table 6 | The table shows an increase in adjusted net enrollment rate in % across all levels of education from primary to higher secondary as reported by the UDISE - data

Levels	2017-18	2018-19	2019-20	2020-21	2021-22
Primary	96.47	94.26	97.31	98.61	99.00
Upper primary	80.95	78.49	81.61	84.44	85
Secondary	62.24	57.59	59.98	61.85	62
Higher secondary	29.97	30.78	32.3	34.72	35

Chart 3 | The difference between the mean score in 2021 compared to the score in 2017-2018 in Classes VIII and X across various subjects among SC/ST/OBC and general category students, according to the National Achievement Survey examinations

	General	SC	ST	OBC
Class X Social Science	-8	24	-23	-10
Class X Science	-34	45	-48	-30
Class X Maths	-36	34	-37	-34
Class VIII Social Science	-16	27	-27	-17
Class VIII Science	-9	28	-26	-18
Class VIII Maths	-5	17	-14	-10
Class VIII Language	+13	5	-1	-1

Source: udise.nic.in; rebeccawangher.net/thehindu.com; aserindia.org

INTRODUCTION

'A higher number of promotions but lower learning outcomes' is an article written by Jasmine Nihalani, Rebecca Rose Varghese and Vignesh Radhakrishnan which is published in the Hindu newspaper. This article focuses on the impact of Covid-19 on the field of higher education in India. This article is mainly based on the survey of Unified District Information System for Education (UDISE). According to this study after the outbreak of Covid-19 the promotion rate of Schedule Caste and Scheduled tribe had increased even though the learning outcomes were poor the promotion rate was high.

SEQUENCE

The data indicates the covid impact on Indian higher education. As in covid period (2020-2021) promotion rate and drop outs were increased and repetition rate were decreased. As per the table representation, according to ASER it shows as 'not enrolled' in schools in 2020 and 2021 compared to 2018 increased in every other age group except 15-16 age groups.

EPC

TASK-06

Submitted To,

Sisna A.S

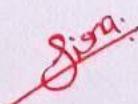
Assistant Professor

Jesus Training College, Mala

Submitted by,

Abiya Prasad

Natural Science



Submitted on : 20-12-2022

INDIAN MEDICINAL PLANTS

A COMPENDIUM OF **500** SPECIES

ARYA VAIDYA SALA



Universities Press

INTRODUCTION

Ayurveda, with its base in medicinal plants and its origin in ancient Indian history, is recognized as one of the major systems of alternative and complementary medicine. Of particular significance has been the fact that the therapeutic values cited in the ancient texts and the oral tradition have been subjected to continuous interpretation and consolidation by scholars in the field. The concerns of medical botany, horticulture and the industry associated with these which have focused on the treatment of disease conditions have lent critical importance to the necessity for the accurate documentation and identification of such plants. This unique compendium offers profiles of 500 key species with detailed taxonomic information. One of the lead features of this compilation is the special technique used in the illustrations, both colour and line, which aims to achieve authenticity of texture, colour and form. The main text present properties and uses in a format which cites ancient verse texts and ethno botanical sources. This rare work in five volumes should be of special interest to practitioners of alternative medicine, students of Ayurveda, the research community and industry associated with medical botany, pharmacologists, sociologists and medical herbalists.

QUESTIONS FOR QUESTION ANSWER SESSION

1. Which part of the plant *Cynodon dactylon* is used to prepare medicines?

Ans. Whole plant.

2. What are the major uses of *Cassia fistula*?

Ans. Leaves are useful for curing skin diseases, leprosy, tumours, asthma.

3. In which family *Eucalyptus globulus* belongs to?

Ans. Myrtaceae.

4. What are the major uses of *Euphorbia Antigorium*?

Ans. Used in the kapha, otalgia, flatulence etc.

5. In which family *Catharanthus roseus* belongs to?

Ans. Apocynaceae.

6. Which are the useful parts in *Clerodendrum serratum*?

Ans. Roots and leaves.

EPC

TASK - 7

Submitted To ,

Sisna A.S

Assistant Professor

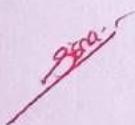
Jesus Training College, Mala

Submitted By,

Abiya Prasad

Natural Science.

Submitted on : 09-01-2023.



A Study on Academic Stress among Higher Secondary Students

Dr.P.SURESH PRABU

Abstract: Stress can exist when working at a fast place, doing difficult problems, or listening to someone shout at you. It can be brought about through conflicts, making decisions, or otherwise straining abilities, or it can exist because of numerous social demands on time. We have noted that emotional states tend not to be long lasting, whether they are unpleasant emotions like fear, or pleasant ones, such as joy. Yet on occasion such states may persist for long periods of time, or they may reach excessively high levels. When this happens, the result typically is labeled ("stress"), and its manifested in psychological as well as physiological terms. Stress and its manifestations, such as anxiety, depression, and burnout, have always been as a common problem among people in different professions and occupations. In the last few decades, alarm has already been provoked by the proliferation of books, research reports, popular articles and the growing number of organized workshops, aiming to teach people how to cope with this phenomenon. The purpose of the study is to find out the level of academic stress among higher secondary students. The present study consists of 250 XI standard students studying in higher secondary schools situated in Namakkal District of Tamil Nadu, India. The sample was selected by using simple random sampling technique. The present study reveals that the higher secondary students are having moderate level of academic stress and irrespective of sub samples of the higher secondary students are having moderate level of academic stress. The male student's academic stress is higher than female students. The urban student's academic stress is higher than rural student. The Government school student's academic stress is less than private school student. The science subject student's academic stress is higher than arts student. The students whose parent's education as literate level academic stress is higher than their counter part.

I. INTRODUCTION

Stress is viewed as a negative emotional, cognitive, behavioural and physiological process that occurs as a person tries to adjust to or deal with stressors (Bernstein, et al 2008). Stressors are defined as circumstances that disrupt, or threaten to disrupt, individuals' daily functioning and cause people to make adjustments (Auerbach & Grambling 1998). Auerbach and Grambling (1998) regard stress as an unpleasant state of emotional and physiological arousal that individuals experience in situations that they perceive as dangerous or threatening to their well-being.

However, stress is perceived in different ways and may mean different thing to different individuals. It is perceived as events or situations that cause individuals to feel tension, pressure, or negative emotions including anxiety and anger. Moreover, other people define stress as the response to existing situations, which includes physiological changes (increased heart rate, and muscle tension), emotional and behavioural changes (Bernstein, et al 2008). Stress is always regarded as a psychological process that involves an individual's personal interpretation and response to any threatening event.

It is important to note that stress can have both positive and negative effects on people. It means that stress may be a normal, adaptive reaction to threat. Its role is to signal and prepare individuals to take defensive action. Take for instance, fear of things that present realistic threats motivates individuals to deal with them or avoid them. Most psychologists assert that moderate stress motivates individuals to achieve and fuels creativity, although stress may hinder individuals from performance on difficult tasks (Auerbach & Grambling 1998).

Auerbach and Grambling (1998) argue that stress can lead to serious problems if it is not managed effectively. Moreover, when a person is exposed to chronic stress, she or he is likely to experience both physical illness (including heart disease), and mental illness (e.g., anxiety disorders). The field of Health Psychology focuses in part, on how stress affects bodily functioning and on how people can use stress management techniques to prevent or minimize disease (Grambling and Auerbach 1998).

Stress can be imposed on an individual by unusual physical condition such as excessive heat or cold, illness, deprivation of oxygen, or exposure to strong light. Standing at attention a long time, climbing a mountain, or continuous immersion in water can also place strong demands for adaptation on the individual.

INTRODUCTION

We opted an article entitled 'A study on academic stress among higher secondary students' (Dr. P. Suresh Prabhu, 2015), in the journal International Journal of Humanities and Social Science Innovation. The study found out the level of academic stress among higher secondary students situated in Namakkal district of Tamil Nadu, India. Stress can be defined as any type of change that causes physical, emotional or psychological strain. Stress is the response of the body to anything that requires attention or action. Everyone experience stress to some degree. The way of responding to stress, makes a big difference to your overall well-being.

Academic stress is defined as the response of the body to academic-related demands that exceed the adaptive capabilities of students. It is estimated that 10-30% of students experience some degree of academic stress during their academic career. Some of the common causes responsible for stress in an academic setting include excessive assignments, time management and social skills, peer competition etc.

Depression, anxiety, behavioural pattern, irritability etc are few of the many problems reported in students with high academic stress. Research shows that academic stress leads to less well-being and an increased likelihood of developing anxiety and depression. Additionally, students who have academic stress tend to do poorly in their academics. This shows how this stress can keep from doing as well as they could.

A Study on Academic Stress Among Higher Secondary Students.

Stress is a feeling of pressure, strain, anxiety and being overwhelmed. It is characterized by overall irritability, feeling of insecurity, nervousness, withdrawal from social activities, loss of appetite, depression, frequent panic attacks, exhaustion etc. Among students stress is a huge issue which affect their mental, physical and emotional well being. Relationship conflicts at home, new work responsibilities, unexpected loss of loved ones, health problems, over expectations etc. be the reason for stress.

High school students face the intense competitiveness of taking challenging courses, studying and college placement test and deciding an important and life changing plan for their future. Research has found that students who participate in regular physical activity, report lower levels of perceived stress. While these students still grapple with the same social, academic and life pressures as their less active peers, these changes or challenges feel less stressful and are easier to manage. Listening music, avoiding alcohol and drugs, proper diet, proper sleep and engaging free time by doing personal hobbies may help to relieve from stress.

Stress in students cause serious negative effects, both physical and academic stress can play a part in problems such as headaches, high blood pressure, heart problems, diabetes, skin disease, asthma, arthritis, depression and anxiety. Stress does not affect all people equally. Coping with stress is therefore an

JESUS TRAINING COLLEGE MALA

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2022-2024 Batch

EPC/Practical/Task. EDV-0.8... Prepare a tool for measuring
any of the domains of the learner. Administer it to a
group of students and interpret the result.
Semester..... II nd Semester.....

Name... Abiya ... Prasad.....

Register No.. S.I.A.W.T.I.N.S.001.....

Optional.. Natural... Science.....

Class Teacher:

Place: MALA

Date : 11 - 1 - 2023

- Principal
Jesus Training College
Mala - 680 732

Principal



INTRODUCTION

The affective domain is one of the domains in Bloom's Taxonomy, with the others two being the cognitive and Psychomotor domains. The affective domain includes the manner in which we deal with things emotionally such as feelings, values, appreciation, enthusiasms, motivations and attitudes. Affective learning is demonstrated by behaviours indicating attitudes of awareness, interest, attention, concern and responsibility, ability to listen and respond in interactions with others and ability to demonstrate those attitudinal characteristics or values which are appropriate to the test situation and the field of study. The affective domain refers to the tracking of growth in feelings or emotional areas throughout the learning experience. In order to be most effective, learning objectives labelled using this domain need a very clear instructional intention for growth in this area specified in the learning objectives.

Likert scale is an orderly scale from which respondents choose the option that best support the opinion. The choices range from strongly agree to strongly disagree.

- It is ideal for large questionnaires with multiple items.
- Produces reliable quantitative data that can be analyzed with relative ease.
- Delivers deeper insight into what people are thinking and feeling.

JESUS TRAINING COLLEGE, MALA

LIKERT SCALE : SYLLABUS

ST. MARY'S C.H.S.S. KUZHIKKATTUSERY

Name of the Student :

Std & Div:

NO.	STATEMENTS	SA	A	U	D	SD
1.	Syllabus is completed on time.					
2.	Syllabus provide opportunity for overall development					
3.	Syllabus is burden for children					
4.	Syllabus include co-curricular activities					
5.	Certain portions in the syllabus are not applicable to daily life.					
6.	Materials included in the syllabus are well organized and presented.					
7.	Study materials related to syllabus are available.					
8.	Enough time is not allotted for lab works.					
9.	Syllabus is based on recent developments					
10.	The syllabus requires changes.					

SA - Strongly Agree

D - Disagree

A - Agree

SD - Strongly Disagree.

U - Undecided

Qn No.	High Percentage Response
1	A%
2	A%
3	SA%
4	SA%
5	SA%
6	A%
7	SA%
8	A%
9	O%
10	SA%

JESUS TRAINING COLLEGE, MALA
(Affiliated to the University of Calicut)



2022-2024 Batch

EPC/Practical/Task: Concept Attainment Model

Semester : I

Name : ABIYA PRASAD

Register No : STP.WTNS.01

✓
Class teacher

Place : Mala

Date : 08 -01 -2023

Dhrey
Principal
Jesus Training College
Mala - 600 732



CONCEPT ATTAINMENT MODEL

Name of the teacher : Abirya Prasad

Class : VIII

School : St Mary's Girls
Kuzhikattusery

Topic : Kingdom
Animalia

Subject : Biology

Name of the concept : Kingdom Animalia

Definition of the concept : Kingdom Animalia is one of the basic groups of all living things that comprises either all the animals or all the multicellular animals.

Essential attributes :

1. Multicellular organism
2. No cell wall
3. Sexual and asexual reproduction
4. Eukaryotic cells

Non-essential attributes

1. Absence of chloroplasts
2. Mobile or non-mobile
3. Shape and size
4. Symmetry.

Examples :

Monkey, cow, snake, snail, deer.

JESUS TRAINING COLLEGE, MALA
2FIELD EXPLORATION
(Affiliated to the University of Calicut)



2022-2024 Batch

EPC/Practical/Task: EDU-01 Assignment 1

VISIT TO A PLACE OF HISTORICAL IMPORTANCE

Semester : First semester - Physical science

Name : Mariya Davis

Register No : STAWTPN011

A handwritten signature in red ink, appearing to read 'Mariya Davis'.

Class teacher:

Principal

Place : Jesus Training College, Mala

Date : 19 - 12 - 2022

The study tour as per the curriculum was an exposure trip to visit a place of historical importance. As per the task and assignment of paper EDU 01 - EDUCATION IN CONTEMPORARY INDIA, our college, Jesus Training College Mala planned a trip to Hill Palace for a day. It was a journey from mala to tripunithura, located in the neighbourhood of Kochi city in Indian state of Kerala on 30th November 2022.

We gathered in our college around 8:30 am and the journey started from college at 9:15 am in two buses. In each bus students of three options entered. The physical science, social science, mathematics in one bus and English, Malayalam, natural science in other bus. Altogether there was 99 students, 4 teachers, one non-teaching staff and our executive director Fr. Binoy Kozhipat also accompanied with us. We reached at the destination at 10:20 am after taking tea and snack we entered into the palace. There were students from other colleges and schools to visit hill palace. The palace was very beautiful situated at hill top having 200 steps to reach the main door.

Conclusion

The trip ended with lots of good memories and understanding the importance of historical Palace. The staff in the complex were generally friendly and helpful and explaining the importance of each and every specialities of hill palace. The search of our root at the hill palace made us feel stronger, because we come from a long line of survivors and special, because we are part of this vast chain of humanity. Historical places are treasures core of information about of ancient cultures and people. They give plenty of opportunities to discover many interesting and amazing things.

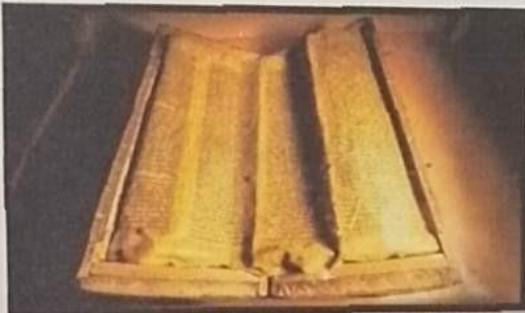
We gained a lot of knowledge about our past through the visit. The Hill palace museum is an important centre of learning. It provides unique resources for education. As a learning centre, it gives an opportunity to work with a wide range of natural and cultural heritage. It gives an idea to any alien about our vast and rich cultural heritage. This museum can bring the sense of integrity among people living in different parts of kerala. This museum also bring the sense of our socio-economic culture thereby providing the ancient culture and habitat. The museum also played



Royal Hill Palace Tripunithu



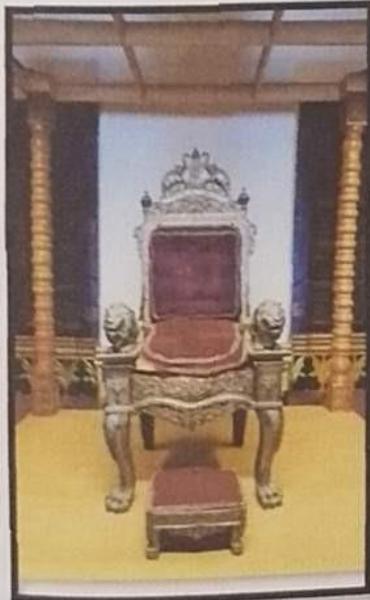
The sky Bird's-eye view of Thripunithura Hill Palace



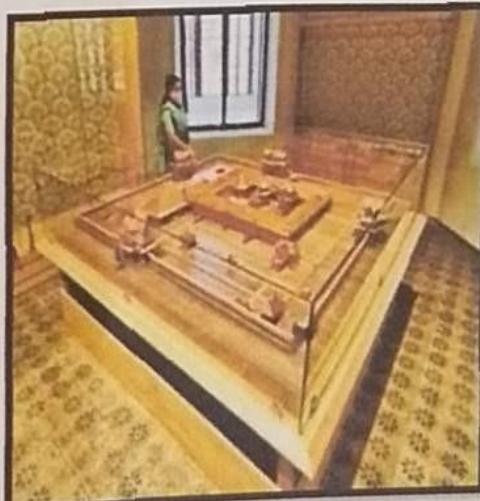
The Torah written on goat skin preserved at the Hill Palace Museum in Tripunithura,



Unveiling culture



Hill palace royal throne



Exhibits based on classifications like weapons and jewellery



The Royal Crown of Kochi.

1. HANDS- ON ACTIVITY
JESUS TRAINING COLLEGE, MALA
(Affiliated to the University of Calicut)



2022-2024 Batch

PC/Practical/Task: Workshop Report.....

Semester : II.....

Name : Abiya Prasad.....

Register No : STDWITN5001.....

Class teacher

Dny
Principal

Place : Mala

Date : 16-3-2023

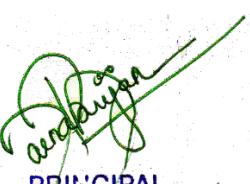
Principal
Jesus Training College
Mala - 680 732

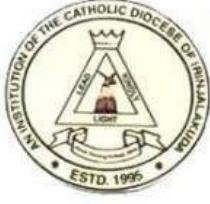


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CONTENT	PAGE NO.
FLOW CHART	1
DIAGRAM CHART	2
CONTENT CHART	3
TABLE CHART	4
TREE CHART	5
FLIP CHART	6
STILL MODEL	7
WORKING MODEL	8




Principal
Jesus Training College, Mala



JESUS TRAINING COLLEGE, MALA

(DIOCESE OF IRINJALAKUDA)

An ISO Certified Institution (ISO 9001: 2015)

Affiliated to the University of Calicut & approved by NCTE

P.O. Mala, Thrissur - 680732

PH : 0480 2891 245

Mob : 9539673550

Principal : 0480 2 897 677

Email:jtcma@rediffmail.com

www.jesustrainingcollege.in

Date

CIRCULAR

SUPW Workshop 2024

Dear student teachers,

The SUPW Workshop of the academic year is scheduled for 4/06/2024. All are advised to attend the session and kindly bring the below – mentioned equipment's on that day.

1. Feviol
2. Newspaper
3. Chart paper/thick gift paper
4. Ruler
5. Jute thread
6. Cotton saree
7. Thread and needle
8. Scissors

PRINCIPAL



PRINCIPAL
Jesus Training College, Mala

SUPW Workshop

4 JUNE 2024, TUESDAY
10:00 AM TO 03:30PM

Seminar Hall



Resource person : Naadiya

Report of Socially Useful Productive Work

Submitted To,

Vipin V.

Asst. Professor
JTC, Mala

Principals
PRINCIPAL
Jesus Training College, Mala



Submitted By,
Rosna Joy
Natural Science

Socially useful productive work (SUPW) is an integral part of the school curriculum designed to engage students in meaningful activities that serve both the community and their personal development. Here's how SUPW benefits.

Students :

- **Skill Enhancement** : Through SUPW, students acquire practical skills that extend beyond textbooks. Whether it's gardening, carpentry or community service, they gain hand-on experience that fosters creativity, problem-solving and adaptability.
- **Teamwork and collaboration** : Working on projects alongside peers, teachers, cooperation, communication and team work. Students learn to appreciate diverse perspectives and contribute effectively to group efforts.
- **Responsibility and Discipline** : SUPW instils a sense of responsibility. Students must manage their time, resources and tasks efficiently. Regular engagement in productive work cultivates discipline and commitment.
- **Community Connection** : By participating in activities that benefit the community such as cleaning public spaces, organising health camps or promoting environmental awareness.

By integrating practical work with education, SUPW prepares students for the real-world challenges, encouraging them to become proactive members of society. The programs' emphasis on community service and skill development ensures that students emerge from their academic journey as compassionate, competent and capable individuals ready to contribute positively to the world around them.

Product No: 1 - Paper Bag

Paper bags offer a blend of practicality, sustainability and safety, making them a smart choice for both consumers and businesses. Unlike the plastic bags, they don't harm the environment or wildlife and reduce pollution.

Advantages

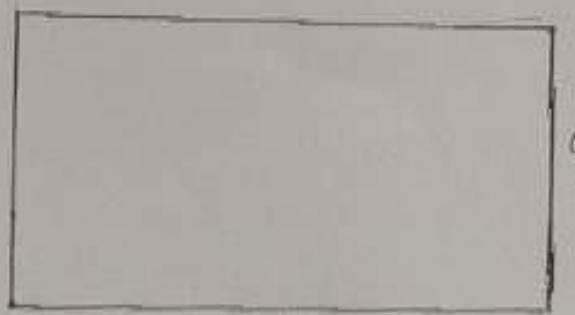
- * Eco-friendly
- * Versatility and emotionality
- * Recyclability and circular economy
- * Safe and non-toxic
- * Boost your brand awareness

Materials Used

- 1 chart paper
- 2 Glue
- 3 Ruler
- 4 Thread / Ribbon
- 5 Scissors
- 6 Pencil

Procedure

Step 1: Cut a piece of chart paper to approximately 9.5 x 15 inches



9.5 inch

15 inch

(fig:1)

Product No: 2 - Cloth floor mat

Cloth floor mats combine functionality, comfort and visual appeal, making them a popular choice for both residential and commercial spaces which usually need to clean and maintain them regularly to maximize the benefits.

Advantages

- * Eco-friendly
- * Aesthetic ambience
- * Easy maintenance
- * Comfort and safety
- * Dirt and debris trapping

Materials Used

- * Saree (5 metre)
- * Scissors
- * Needle
- * Thread

Procedure

Step 1 - Measure the cotton saree and cut into 3 equal pieces along its longer side as given in the figure(1)

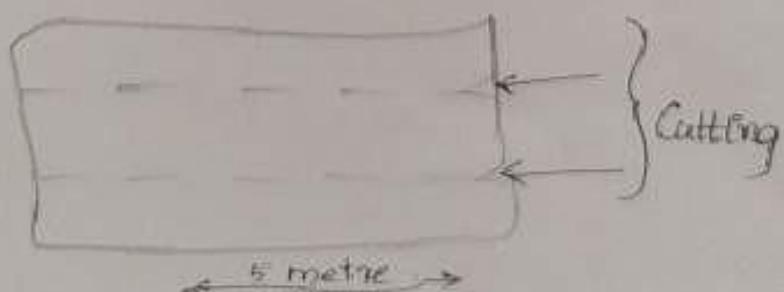
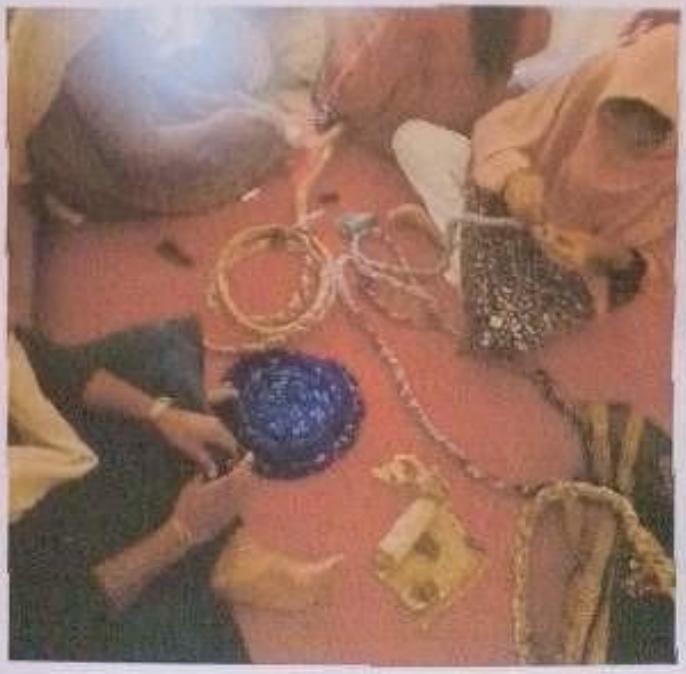
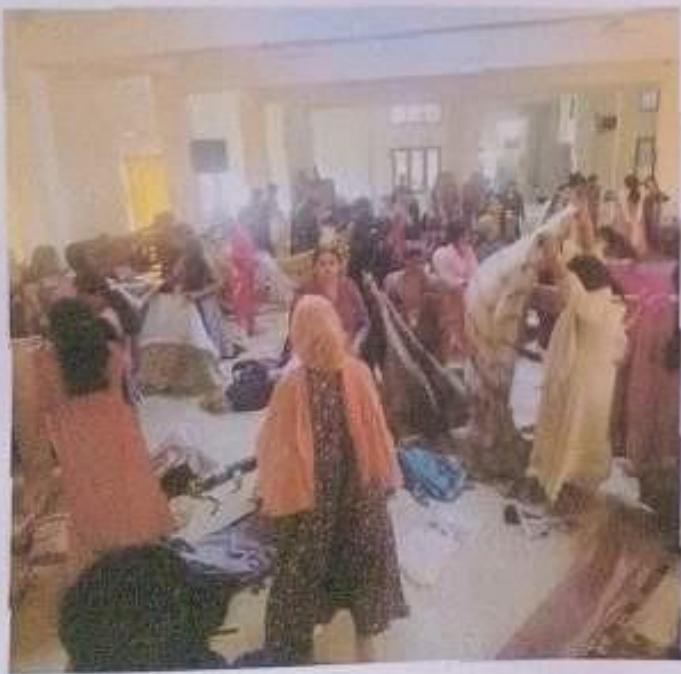
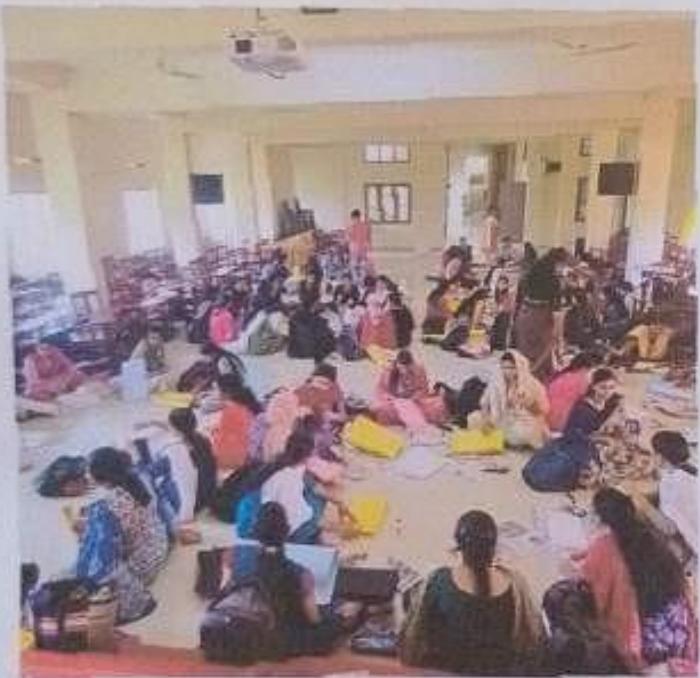
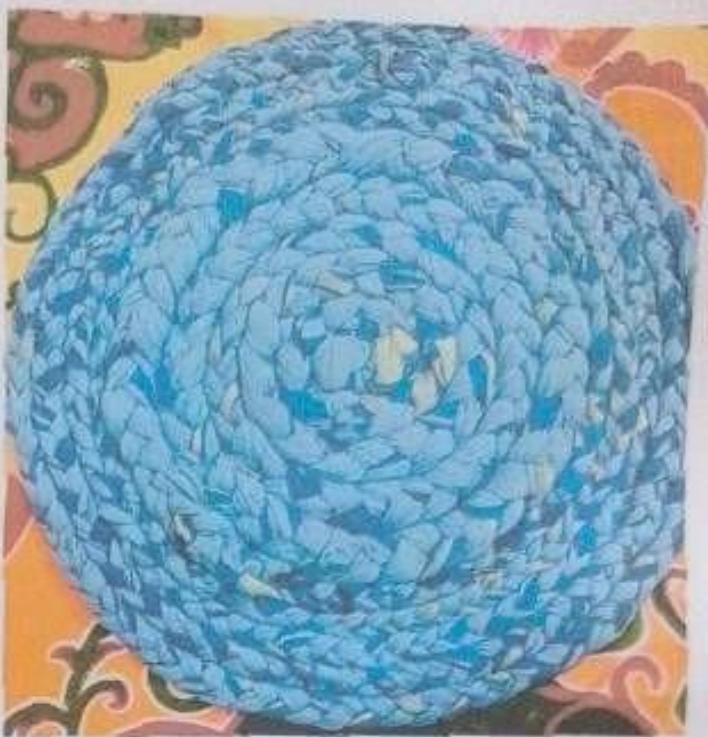


Fig (1)



2. PREPARATION OF TERM PAPER

JESUS TRAINING COLLEGE
MALA

(Affiliated to the University of Calicut)

ACHIEVEMENT TEST



Name of Student : A.BIYA PRASAD.....

Admission No. : 2793.....

Register No. : S.TAHUTNS.001.....

Subject (Group) : NATURAL SCIENCE.....

Certified that this is a Bonafide Record

Brena
MEMBER OF THE FACULTY

Place...MALA.....

Date...29.01.2024.....

*Venkatesh
29/1/24*

Dnyy
PRINCIPAL

Place...MALA.....

Date...29-01-2024.....



INDEX

INTRODUCTION

Assessment refers to a successful accomplishment or attainment of a goal, task, or objective. It is the realization of one's efforts and abilities, often accompanied by a sense of accomplishment and satisfaction. Achievements cover various aspects of life including academics, personal development and extracurricular activities. They signify the demonstration of skills, knowledge, perseverance, and dedication towards reaching a specific milestone or target.

An achievement test is an assessment tool used to measure a student's knowledge, skill, or competencies in a specific subject area. It is designed to evaluate the level of mastery or accomplishment attained by an individual in relation to predetermined learning objectives or standards.

Achievement tests are typically administered at the end of a course, unit, or academic year to gauge the extent to which students have acquired the intended knowledge and skills. These tests provide valuable information about students' academic performance, identifying areas of strength and areas that may require further attention.



The results of achievement tests can also have broader implications, influencing educational policies, curriculum development, and school accountability measures. Additionally, achievement tests are frequently used to assess the proficiency of students in specific areas in a unit. Overall, achievement tests serve as valuable tools in evaluating and enhancing educational outcomes.

As instructed in our B.Ed curriculum; achievement tests were conducted at St. Mary's C.H.S Kuzhikkathusery. The test were conducted for students of class VI and IX. In VIth standard, test was conducted from the unit Food For Health and in IXth Standard, test was conducted from the unit 'Breathing For Energy'.

ACHIEVEMENT TEST PLAN-IX(H.S)

Name of the teacher - Abiya Prasad

Name of the School - St. Mary's C.H.S
Kuzhikattussery

Standard - IX

Subject - Biology

Unit - Breathing For Energy

Duration - 1 hour

Maximum mark - 20

Date - 25-10-2023

RAJEEV MUTHA



LEARNING OUTCOMES

Unit 4 - Breathing For Energy

- 4.1 To understand parts of respiratory system
- 4.2 To analyze changes occurring during inspiration and expiration.
- 4.3 To understand role of haemoglobin in oxygen transport.
- 4.4 To understand methods of expulsion of CO_2 from body.
- 4.5 To explain consequence of excess CO_2 in body
- 4.6 To understand anaerobic respiration.
- 4.7 To understand about vital capacity and tidal volume
- 4.8 To evaluate mode of respiration in other organisms.
- 4.9 To understand mode of respiration in plants.

THINKING SKILLS

1. Remembering
 - (i) Recognising
 - (ii) Recalling.

2. Understanding

- (i) Interpreting
- (ii) Exemplifying
- (iii) Classifying
- (iv) Summarising
- (v) Inferring
- (vi) Comparing
- (vii) Explaining

3. Applying

- (i) Executing
- (ii) Implementing

4. Analysing

- (i) Differentiating
- (ii) Organizing
- (iii) Attributing

5. Evaluating

- (i) Checking
- (ii) Critiquing

6. Creating

- (i) Generating
- (ii) Planning
- (iii) Producing

PREPARATION OF DESIGN OF TEST

WEIGHTAGE TO UNIT AND LEARNING OUTCOMES

SL. NO	UNIT	LEARNING OUTCOMES	SCORE	PERCENTAGE (%)
Breathing for Energy.	4.1	1	5%	
	4.2	2	10%	
	4.3	1	5%	
	4.4	3	15%	
	4.5	2	10%	
	4.6	4	20%	
	4.7	3	15%	
	4.8	3	15%	
	4.9	1	5%	

WEIGHTAGE TO THINKING SKILLS

SL NO	THINKING SKILLS	SCORE	PERCENTAGE
1	LOTS	8	40%
2	HOTS	12	60%
	Total	20	100%

WEIGHTAGE TO FORM OF QUESTIONS

SL. NO.	FORM OF QUESTION	NUMBER OF QUESTION	SCORE	PERCENTAGE
1.	Objective	4	4	20%
2.	Short Essay	5	12	60%
3	Essay	1	4	20%
	Total	10	20	100%



BLUE PRINT

UNIT	LEARNING OUTCOMES	FORM OF QUESTIONS	THINKING SKILLS						TOTAL	
			LOTS			HOTS				
			O	S	E	O	S	E		
Breathing For Energy.	4.1		(1)							
	4.2			(2)						
	4.3			(1)						
	4.4			(1)	(2)					
	4.5				(2)					
	4.6							(4)		
	4.7						(3)			
	4.8				(3)					
	4.9		(1)							
			6	7				3	4	20

The number inside the bracket indicate the number of marks and outside the bracket indicate the number of question.

Provision of choice

There is no choice.

SECTION OF QUESTION PAPER

There are 3 sections in the question paper.

Section - A → Objective Type

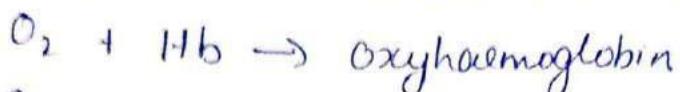
Section - B → Short Answer Type

Section - C → Essay type.

CONSTRUCTION OF TEST ITEM

Section A

1. Analyse the illustration and identify *



2. Find out errors in underlined part

a) Gaseous exchange in leaves takes place through lenticels

b) Gaseous exchange through lenticels is an example of active transport.

- 3) Double layered protective membrane of lungs

- 4) _____ molecule contains four protein strand and haem.

Section - B

- 5) If excess CO_2 formed in body it is not eliminated in time homeostasis will be disturbed. How?

- 6) The elimination of CO_2 from cells takes place only through haemoglobin. Do you agree with statement. Why?

- 7) Complete the table given below using following information

- Volume of thoracic cavity increases.

- Intercostal muscle contract

- Diaphragm relax

- Pressure in thoracic cavity increases.

Inspiration	Expiration

Section C

8) Analyze the following terms

- a) Tidal volume b) Vital capacity c) Emphysema
- i) which is the indicator of strength of muscle in thoracic cavity.
- ii) Differentiate tidal volume and vital capacity

9) Rearrange the column B & C according to A

Organism	Respiratory organ	Exchange of gases
Amoeba	Cell membrane	Directly with tissue
Cockroach	Trachea	through blood capillary
Fish	Gills	Directly from air
		Directly with cytoplasm.

Section

- (i) Many organisms can survive even in absence of O₂
- (Q) Do you agree with statement why.
- b) If you agree describe the process with help of flow chart
- c) What is fermentation?
- d) Write any 2 examples of fermentation in daily life.

SCORING KEY AND MARKING SCHEME

Que. No.	VALUE POINTS	SCORE	TOTAL
1.	Carbaminohaemoglobin	1	1
2	a) Stomata b) Diffusion	1/2 1/2	1
3.	Pleura	1	1
4	1 haemoglobin	1	1
5	The excess carbon dioxide combine with water in the cell to produce carbonic acid. When the level of carbonic acid in body increases. It increases acidity of body	2	2
6.	No Carbon dioxide + haemoglobin → Carbaminohaemoglobin 23% Carbon dioxide + Plasma water 7% Carbon dioxide + water in RBC → Bicarbonate 70%	2	2
7.	Inspiration Volume of thoracic cavity increases Intercostal muscle contract.		

Expiration

Diaphragm relax

Pressure in thoracic cavity increases

8 i) Vital capacity

i) Tidal volume - The amount of air we breath in and out during normal breathing is human 500ml.

Vital capacity - Volume of air that can be breathed out by forceful expiration after maximum or forceful inspiration.

In male - 4.5 l Female - 3 l.

iii) Emphysema reduce vital capacity of an individual

9 Amoeba - Cell membrane - Directly with cytoplasm.

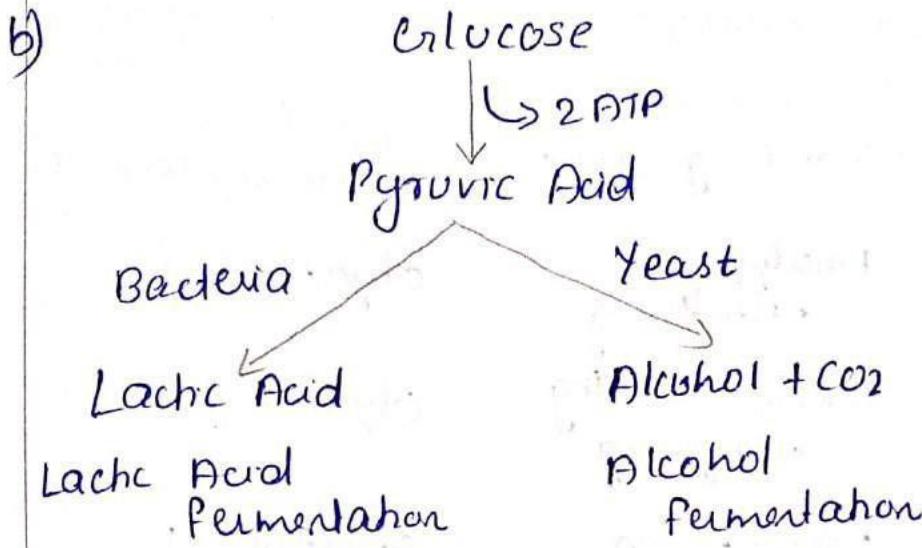
Cockroach - Trachea - Directly with tissues.

Fish - Gills - Through capillary to blood.

10 a) Yes in many organisms respiration take place without O_2
eg: bacteria and yeast.

3

3



4

c) Fermentation is anaerobic process in which energy can be released from glucose even if O_2 is not available

d) Milk to curd
Production of beer and wine.

QUESTION WISE ANALYSIS

Qn. No.	Content	Learning Outcome	Thinking Skills	Form of questions	Score	Time
1.		4.3	Analyzing • Attributing	objective	1	
2.		4.9	Understanding • Inferring	objective	1	
3		4.1	Remembering • Recalling	objective	1	
4		4.3	Remembering • Recalling	objective	1	
5	Breathing For Energy	4.5	Applying • Implementing	short essay	2	
6		4.4	Applying • Implementing	short essay	2	
7		4.2	Understanding • Classifying	short essay	2	
8		4.7	Analyzing • Differentiating	short essay	3	
9		4.8	Analyzing • Organizing	short essay	3	
10		4.6	Evaluating • Critiquing	Essay	4	
				✓		

MARK LIST

(Mark to be converted to out of 100)

Sl. No	Name	Mark	Rank
1.	Diya Somadas	55	13
2.	Riya Prince	60	10.5
3.	Ann Manya Varghese	55	13
4.	Neha Mary	75	3
5.	Courni	30	21.5
6.	Nehra Fathima	45	18
7.	Diya Thanas	40	20
8.	Romiya Rose	70	5
9	SreebhadrA	65	8
10	Hafna K.A	60	10.5
11	Bidheesha	45	18
12	Safoora N.A	80	1.5
13	Atonya shayu	70	5
14	Angelinea	30	21.5
15	Anukha	65	8
16	Afna	50	15.5
17	Nivedhya K.R	45	18
18	Nafisathul Misriya	80	1.5
19	Balabhadra Santhosh	50	15.5
20	Sona Fathima	65	8
21	Sreelakshmi k.m	70	5
22	Andnya Joseph	55	3

INTERPRETATION

I have conducted an achievement test for students in class IX in St. Mary's O.H.S. Kuzhikkattusay. On 22 students of IX D appeared for the examination. Students of IX D passed and students failed. The highest score is out of 100 and lowest score is out of 100.

$$\text{Arithmetic Mean} = 55.04$$

$$\text{Median} = 56.5$$

$$\text{Mode} = 64.25$$

$$\text{Range} = 51$$

$$\text{Mean deviation} = 11.48$$

$$\text{Standard deviation} = 14.29$$

Average marks scored is around = 55.04

$$\text{Standard score} = \bar{x} \pm \frac{2}{3} \sigma$$

$$= 55.04 \pm \frac{2}{3} \times 14.29$$

$$= 55.04 \pm 9.526$$

$$45.514 \text{ or } 64.566$$

There are three kind of students in the class
who got marks above 64.566 are above average,
below 45.514 are below average and who got
marks is between are average.