KRISHNA PUBLIC SCHOOL - UTAI

SUMMER HOLIDAYHOMEWORK

SESSION 2024-25

CLASS: XII (MATHS / BIOLOGY)

PREFACE

DearParentsandStudents,

The arrival of summer vacation will provide much-needed relief from the demanding schedule of school days. We really wish you have a great time on your travels and that you enjoy every second of this summer. It is crucial that you exercise your minds in addition to taking time to unwind and rejuvenate.

In light of this, we have created a number of fun activities to keep the students busy and involved over the summer break. These enjoyable tasks and assignments would improve learning abilities, aid in a better understanding of subjects, and serve as an excellent crash course with the goal of raising academic productivity.

These exercises will improve your understanding while also assisting you in reviewing what you were taught. These assignments will be graded as either portfolio; art integrated, or subject enrichment activities.

We urge parents to help and encourage their children to do their best effort and turn in the assigned assignment on time. Your child's capacity to learn is greatly impacted by your encouragement and support.

Within a week of the school reopening, that is, from June 19 to June 24, 2023, the subject instructors will get the neatly completed Holiday Home Work that is relevant to the topics posed.

I'm wishing you a safe and enjoyable summer break.

PRINCIPAL
KPS, UTAIROAD

SUBJECT – ENGLISH

ENGLISH: Art Integrated Projects
1. PPT (7-8 slides) on Bangle Making Industry (Lost Spring)
2. Flyer/ Brochure (1 A 4 size sheet) on Meditation (Keeping Quiet)
3. Drawing /Painting (Cover Page 1 sheet) My Mother at Sixty-six)
4. READ AND UNDERSTAND THE PROSE:
THE LAST LESSON
INDIGO
THE TIGER KING
THE THIRD LEVEL
Write question and answer of the lesson which will be provided in pdf format to you all.

SUBJECT – HINDI

1) **संसार में कष्टों को सहते हुए भी खुशी और मस्ती का माहौल कैसे पैदा किया जा सकता है आज के इस परिवेश को ध्यान में रखते हुए 100 से 120 शब्दों में एक अनुच्छेद।**
2) **आप बाजार की भिन्न-भिन्न प्रकार की संस्कृतियों से अवश्य परिचित है मॉल की संस्कृति और सामान्य बाजार और हाट की संस्कृति में आप क्या अंतर पाते हैं। लिखें**
3) **उल्टा पिरामिड शैली के अंतर्गत समाचार पत्र से तीन समाचार की कटिंग लगाकर छह ककारो का वर्णन करें।(क्या, कब कैसे)**
4) **रचनात्मक लेखन- 1)हिंदी भाषा का बढ़ता चलन और प्रभाव**
   2) इंस्टाग्राम का बढ़ता जलन

5) **समाचार पत्र से तीन विज्ञापन की कटिंग चिपकाएँ उनके बिंदुओं पर प्रकाश डालें।**

एवं

(आर्ट इन्टीग्रेटेड प्रोजेक्ट)
1) **केरल एवं छत्तीसगढ़ राज्य के ऐतिहासिक स्थलों की तुलना कीजिए।**
(नोट्- आपको दो अलग-अलग प्रोजेक्ट बनाने हैं, प्र.1-5 हिंदी विषय का प्रोजेक्ट है, दूसरा प्रोजेक्ट- आर्ट इन्टीग्रेटेड का)

SUBJECT – PHYSICAL EDUCATION

Project 01: Physical fitness test SAI Khelo India Test:
. BMI (Body Mass Test)
. Plate tapping test
. Flamingo balance test
. Partial curl up
. Pushups (boys / girls)
. Sit and reach
. 600m Run / Walk

. 500m Dash
Project 02: Yogic Practice
Write there (Procedure, Benefits and Contraindication) of
. Obesity
. Diabetes
. Asthma
. Hypertension
. Back pain

Project 03: Proficiency in Games and Sports:-
. Badminton / Volleyball

SUBJECT – CHEMISTRY

1. **Investigatory Project:**
Each student is required to conduct and document an investigatory project as part of the curriculum. The project should be neatly compiled in a project file and submitted upon our return to school and the topics are-

Roll Number 1 to 17:- Study of the quantity of casein present in different samples of milk.
Roll number 18 to 35:- Study of common food adulterants in butter sugar salt, oil, etc.

2. **Practical Copy Maintenance:**
Organize your practical copy into clear sections for each experiment, including objectives, materials required, procedure, observations, and results.
Use legible handwriting and ensure that your practical copy is neat and well-presented.

SUBJECT – MATHS

1. **Activity Copy (practical copy) Maintenance**
Organize your activity copy into clear sections for each activity, includingobjectives, materials required, method of construction, demonstration, observations, application.
Use legible handwriting and ensure that your activity copy is neat and well-presented.

Following **activities record** are to be maintained in the **activity copy**

1. To verify that the relation R in the set / of all lines in a plane, defined by R= ((l,m): 11 m) is symmetric but neither reflexive nor transitive.

2. To verify that the relation R in the set I. of all lines in a plane, defined by R= ((l, m): 1||m} is an equivalence relation

3. To demonstrate a function which is not one-one but onto

4. To demonstrate a function which is one-one but not onto

5. To draw the graph of sin x, using the graph of sin x and demonstrate the concept of mirror reflection (about the line y=x).

6. To explore the principal value of the function $sin^{-1}x$ using a unit circle.

7. To sketch the graphs of a and log.x, a>0, a1 and to examine that they are mirror images of each other.

8 To establish a relationship between common logarithm (to the base 10) and natural logarithm (to the base e) of the number x.

SUBJECT – PHYSICS

Instructions:

- Make two separate copy for practical's and activities.
- Make an investigatory project on the given topic

1.**Investigatory project**- To investigate the relation between the ratio of (i) output and input voltage and (ii) number of turns in the secondary coil and primary coil of a self-designed transformer.

Experiments

SECTION-A

1. To determine resistivity of two / three wires by plotting a graph for potential difference versus current.
2. To find resistance of a given wire / standard resistor using metre bridge.
3. To verify the laws of combination (series) of resistances using a metre bridge.
OR
To verify the laws of combination (parallel) of resistances using a metre bridge.
4. To determine resistance of a galvanometer by half-deflection method and to find its figure of merit.

SECTION-B

1. To find the focal length of a convex lens by plotting graphs between u and v or between 1/u and 1/v.
2. To determine angle of minimum deviation for a given prism by plotting a graph between angle of incidence and angle of deviation.
3. To find the refractive index of a liquid using convex lens and plane mirror.
4. To draw the I-V characteristic curve for a p-n junction diode in forward and reverse bias.

Activities–

Section-A

1. To assemble a household circuit comprising three bulbs, three (on/off) switches, a fuse and a power source.

2. To assemble the components of a given electrical circuit.
3. To study the variation in potential drop with length of a wire for a steady current.

Section-B

1. To identify a diode, an LED, a resistor and a capacitor from a mixed collection of such items.
2.To observe diffraction of light due to a thin slit.
3. To observe refraction and lateral deviation of a beam of light incident obliquely on a glass slab.

SUBJECT: BIOLOGY

Art integrated project

Topic
A gift of nature
Compare between Chhattisgarh and Kerala on the following points
1. Introduction
2. Flora and fauna
3. State's animals, birds and plants
4. National parks and wildlife sanctuaries forest
5. Climate
6. Rivers irrigation and hydroelectric power plant
7. Agriculture
8. Soil and mineral resources
9. Environment protection and conservation measures.

Investigatory project

To study effect of pH on seed germination.

SUBJECT: INFORMATICS PRACTICES

Create a PowerPoint presentation on I.T. Industries in Kerala & Chhattisgarh. Take printout of this file and submit it.