

**HOLIDAY ENGAGEMENT****2023-2024**

Grade- 12A

ENGLISH**INTERNAL ASSESSMENT -2****Project work -2****Topic choices**

1. Evolving food tastes in my neighbourhood.
 2. Corona pandemic and the fallout on families .
 3. Mental wellness is as important as physical fitness.
 4. Brand mania and teenagers
 5. The 21st century and joint families
 6. Internship – a need for teens.
 7. Impact of OTT platforms on the teens
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 9. Overuse of digital devices
 10. Life in children in slum area
 11. Child labour – condition in my city
 12. Impact of online learning on students (Interview with teachers and students)
 13. How pandemic changed education (Interview with teachers and students)
 14. Atrocities against women
 15. The necessity of homes for orphans or old age people
 16. Any age appropriate topic.
 17. The ideas / issues highlighted in the chapters / poems / drama can also be developed in the form of a Project.
 18. Investigation on students reading habits on their academic performance in external examinations.
 19. Pollution & environment : Role of the youth.
 20. The effect of physical education programmes on the wellbeing of senior secondary students.
 21. Online shopping mania.
- To be done in total 5 phases = TOPIC → PLAN → RESEARCH → CREATE → PRESENT.
 - The TOPIC chosen should allow a research / study element & allow listening-speaking opportunities
 - RESEARCH to be done by: Interview / Survey / Online investigations / Reading then analyzing it
 - The Report : Research + Presentation details.

**THE PROJECT – PORTFOLIO INCLUDES THE FOLLOWING:**

- I. Cover Page – Title of Project
- II. School details & detail of students
- III. Statement of Purpose / objectives / goals.
- IV. Acknowledgement
- V. Certificate of completion under the guidance of the teacher.
- VI. Action Plan for the Project
- VII. Questionnaires for interview
- VIII. A 'Report' on the Topic opted for.
- IX. List of resources / bibliography

INCLUSIONS:

Photographs that capture the positive learning experience of the student. (inclusion of yours photos doing research , taking interview and so on.)

Date of submission ; 22nd November 2023.

Note: Use Good quality Profile . Cover the project either with color chartpaper or velvet paper. Use words stickers for highlighting the Topic and sub topics.

PHYSICS

Complete the following experiments and activities

Section A**Experiments**

3. To verify the laws of combination (series) of resistances using a metre bridge.
4. To find the frequency of AC mains with a sonometer

Activities

1. To assemble the components of a given electrical circuit.
2. To study the variation in potential drop with length of a wire for a steady current.
3. To draw the diagram of a given open circuit comprising at least a battery, resistor/rheostat, key, ammeter and voltmeter. Mark the components that are not connected in proper order and correct the circuit and also the circuit diagram.

**Section B****Experiments**

1. To find the focal length of a convex mirror, using a convex lens.
2. To find the focal length of a concave lens, using a convex lens
3. To determine angle of minimum deviation for a given prism by plotting a graph between angle of incidence and angle of deviation
4. To draw the I-V characteristic curve for a p-n junction diode in forward and reverse bias.

Activities

1. To identify a diode, an LED, a resistor and a capacitor from a mixed collection of such items.
2. Use of multimeter to see the unidirectional flow of current in case of a diode and an LED and check whether a given electronic component (e.g., diode) is in working order.
3. To observe refraction and lateral deviation of a beam of light incident obliquely on a glass slab.

CHEMISTRY

Complete the practical file and project work.

BIOLOGY**Diwali Homework for Grade 12 Biology**

Biology is a subject that cannot be studied without flowcharts and diagrams. These visual representations help us understand the complicated concepts of living systems easily. So, for this Diwali Holidays draw, practice and remember the functions of each diagram.

Chapter 1: Sexual Reproduction in Flowering Plants

Fig 1: A diagrammatic representation of L.S. of a flower

Chapter 2: Human Reproduction

Fig 2: Schematic representation of Spermatogenesis and Oogenesis

Chapter 3: Reproductive Health

Fig 3: Surgical Methods of Contraceptives

Chapter 4: Principles of Inheritance and Variation

Fig 4: Dihybrid Cross



Chapter 5: Molecular Basis of Inheritance

Fig 5: Double-stranded polynucleotide chain

Chapter 6: Evolution

Fig 6: Diagrammatic representation of Miller's experiment

Chapter 7: Human Health and Diseases

Fig 7: Structure of an antibody molecule

Chapter 8: Microbes in Human Welfare

Fig 8: A typical biogas plant

Chapter 9: Biotechnology: Principles and Processes

Fig 9: E. coli cloning vector pBR322 showing restriction sites (Hind III, EcoR I, BamH I, Sal I, Pvu II, Pst I, Cla I), ori and antibiotic resistance genes.

Chapter 10: Biotechnology and Its Applications

Fig 10: Maturation of pro-insulin into insulin

Chapter 11: Organism and Populations

Fig 11: Representation of age pyramids for human population

Chapter 12: Ecosystem

Fig 12: Energy flow through different trophic levels

Chapter 13: Biodiversity and Conservation

Fig 13: Showing species area relationship

MATHEMATICS

Diwali H.W. for grade - 12

Activity: 1- To understand the concept of local maxima ,local minima and point of inflection.

Activity: 2- To verify that amongst all the rectangles of same perimeter the square has the maximum area.

Activity: 3- To measure the shortest distance between two skew lines and verify it analytically.

**Physical Education Job Sheet Class-12**
Biomechanics And Sports (Ch -8)**Multiple Choice Questions**

(MCQs)

Q.1. Endurance Equilibrium position is ;

- (a) Standing on one foot (b) Balancing on small ball
(c) Walking on Hanging Rope (d) All of these

Q.2. Low Center of Gravity helps in;

- (a) Jumping (b) Balancing (c) Stability (d) All of these

Q.3. Which of the following principle improves stability and balance ?

- (a) CG with in base of support (b) Widening the base of support
(c) Lowering the CG (d) All of these

Q.4. When the sum of force acting upon the object and sum of the movement acting upon the body are equal to zero than the body is said to in ;

- (a) Equilibrium (b) Static Equilibrium
(c) Dynamic Equilibrium (d) Zero Force

Q.5. The position of Centre of Gravity changes depending upon the ;

- (a) Position of force (b) Position of the body
(c) Position of intersection of force (d) Position of stability

Q.6. Centre of Gravity is the average location of thean object ;

- (a) Weight (b) Force
(c) Balance (d) Velocity

Q.7 Biomechanics is the study of :

- (a) Body system (b) Physics
(c) Biology (d) Biological systems during movements

Q.8 The first of Law of motion is also called ;

- (a) Law of Inertia (b) Law of Acceleration
(c) Law of Action and Reaction (d) All of the above

Q.9 Friction is required for ;

- (a) Fast movement (b) Stopping the object
(c) Both A & B (d) None of these

Q.10 Bio mechanics is important for ;

- (a) Understanding movement (b) Force acting on body
(c) Efficient movement (d) All of these



Q.11. The 2nd Law of motion is also called ;

- (a) Law of Inertia (b) Law of Acceleration
(c) Law of Action and Reaction (d) None of these

Q.12 The 3rd Law of motion is also called

- (a) Law of Inertia (b) Law of Acceleration
(c) Law of Action and Reaction (d) None of these

Q.13 Spike shoes used for Athlete for running give advantage of _____ .

- (a) Force (b) Weight (c) Friction (d) Stability
(c) Red Muscle fiber percentage (d) All of these

Q.14. Static Friction make the object to _____.

- (a) Move (b) Stop (C) Rest (d) Roll

Q15.The Law of Acceleration is also known as

- (a) Law of Inertia (b) Law of Action and Reaction
(C) Law of Momentum (d) Boyle's Law

Q.16.Biomechanics help in

- (a) Improving Techniques (b) Improving Designs of Sports Equipments
(c) Improving performance (d) All of these

Q.17. The force of Friction depends upon

- (a) Nature of surface of contact (b) Material of Object in Contact
(c) Both A & B (d) None

Q.18.Acceleration of an object will increase as the net force increase depending on its

- (a) Density (b) Mass (c) Shape (d) Volume

Q.19. Friction always acts _____ the motion of an object.

- (a) In same direction as (b) Perpendicular
(c) Opposite (d) 45 degree

Q.20.A Football kicked from penalty from penalty point is an example of which Law of Motion ?

- (a) Law of Action and Reaction (b) Law of Acceleration
(c) Law of Inertia (d) All

Q.21. Acceleration of an object will in increase as the net force the net force increases depending on its ;

- (a) Density (b) Mass (C) Shape (d) Volume

Q.22. According to Newton's 2nd Law of Motion the greater the movement of an object,

- (a) Longer distance will travel (b) Stronger will it resist the external forces
© Speedier it will cover the given distance (d) More stable will it remain in its motion



Q.23. Acceleration due to an external force acting on a moving object is technically defined as change in that objects ;

- (a) Location (b) Direction (c) Velocity (d) Movement

Q.24. Which force will determine the quality of bounce ?

- (a) Law of Acceleration (b) Law of Inertia (c) Law of Action and Reaction (d) All

Q.25. Among the following sports, in which Friction plays the least importance role ?

- (a) Car Race (b) Football (c) Hockey (d) Ice-skating

Q.26. Friction is a ;

- (a) Magnetic Force (b) None- contact force (c) Contact Force (d) Couple force

27. The measurement of the amount of Friction a surface will generate is called

- (a) Calibration (b) Coefficient (c) Smoothness (d) Description

Short Answers

Q.1 – State Equilibrium and its types.

Q.2. State four principles of stability ?

Q.3. Write the factors on which the centre of gravity depends with suitable examples.

Q.4. State the factors affecting Projectile ?

Q.5. Give examples of Newton's 2nd Law ?

Q.6 What do you mean by Centre of Gravity.

Q.7. What do you understand by term biomechanics ?

Short answer Question (Type II)

Q.1 Describe Equilibrium and its types ?

Q.2. Discuss Newton's Laws of Motion with suitable example from sports.

Q.3. Discuss Frictional Force. What are its advantages and disadvantages?

Q.4. Define Projectile .

Physical Education Job Sheet Class-12

Psychology And Sports (Ch -9)

Multiple Choice Questions

(MCQs)

Q.1. Personality of the individual can be judged through ;

- (a) Physical dimensions (b) Cognitive dimension
(c) Social dimension (d) All of these

Q.2. Introvert is characterized like ;

- (a) Friendly, talkative and good social activities (b) Shy, talk less and self centered (c) Leadership ability
(d) Less strength and Slim



Q.3. Aggression types are ;

- (a) Hostile aggression (b) Instrumental Aggression
(c) Assertive behavior aggression (d) All of these

Q.4. Jung's personality has _____ characteristics

- (a) Introvert and Extrovert (b) Muscular structure
(c) Calm and even tempered (d) None of these

Q.5. _____ refers to forceful behavior our action intended to dominate.

- (a) Stress (b) Aggression (c) Motivation (d) Anxiety Q.6.
Violence in a match by spectators is type of ;

- (a) Hostile Aggression (b) Instrumental Aggression
(c) Assertive behavior Aggression (d) None of the above

Q.7 . Emotionally unstable anxiety, sadness are attitude of which personality ?

- (a) Extroversion (b) Neuroticism
(c) Agreeableness (d) Openness

Q.8 Aggressive behavior of sports person is influenced by a ;

- (a) Emotional identification with the team (b) Tactical Ability
(c) Goal Orientation (d) All of these

Q.9. Traits like Insights, Imagination, Innovation towards new ideas are involve within ;

- (a) Openness (b) Conscientiousness (c) Agreeableness (d) Extroversion

Q.10. Jung Classified the personality in the following way;

- (a) Introvert and Extrovert (b) Calm and even tempered
(c) Muscular structure (d) Introvert and Melancholic

Q.11. A person who is bold and outgoing is an;

- (a) Introvert (b) Extrovert (c) Ambivert (d) Somatotype

Q.12. Which of the following is a legitimate behavior ?

- (a) Hostile Aggression (b) Instrumental Aggression
(c) Assertiveness (d) Proactive Aggression

Q.13. Aggression is displayed in sports through_____.

- (a) Assertion of Views (b) Use of abusive words
(c) Walking away from the opponent (d) Strictly following the rules

Q.14. Exercise promotes

- (a) Fun and home activities (b) Brain activities
(c) Psychological well-being as well as improves quality of life (d) Risk to life

Short Answers (Type I)

Q.1. What is the concept of personality ?



Q.2. How Jung classified the personality ?

Q.3. What are the dimension of big Five Personality Theory ?

OR

Elaborate any three Five Big Theory of Personality.

OR

Enlist Big Five Theory Personalities and describe any three of them while comparing their characteristics.

Q4. Define Aggression. What are the types of Aggression.

Q 5. What are the factors which affects aggression in sports ?

Q.6. Define Aggression. What are its causes and its types ?

