



**BALUCHISTAN BOARD OF
INTERMEDIATE & SECONDARY
EDUCATION**

Dated Quetta, the July 3, 2026

NOTIFICATION

Subject: REVISED PRACTICAL EXAMINATION MODALITY FOR CLASSES IX AND X (APPLICABLE TO STUDENTS ENROLLED FROM THE ACADEMIC SESSION 2026 ONWARDS)

No. BBISE/DD(R)/196-207 In exercise of Rule. 128 of the BBISE Rules, 2026, and the decisions taken in the meetings of the committee constituted vide Letter No. 2025-26/2030-36/PB(C) on 29 January 2026 and 30 March 2026, the old modality of Practical Part of Examination for class IX & X is hereby replaced, with the following, with immediate effect:

S.No.	Description of Practical Examination Component	Marks
1.	Practical-Based Assessment (PBA) , which shall be conducted along with the theory paper of the respective science subject. <i>(Sample PBA papers -Annex-I)</i>	06
2.	Favourite Practical of the Student	02
3.	Scientific Phenomenon Based Project at Schools by the students supervised by their teachers (List of Projects- Annex-II)	07
4.	Total Marks	15

Note:

1. All concerned are advised to see R.128 **Conduct of Practical Examination, CHAPTER -8 (CONDUCT OF EXAMINATIONS)**, BBISE Rules on BBISE Website for details.
2. **This modality** shall not be applicable to the students who are currently registered in Class-X (Whether they passed or failed science subjects in Class-IX). Their practical examination will be conducted as per **Old Modality**.

(Muhammad Ishaq)
CHAIRMAN

Copy for information and compliance:

1. **The Director Schools, Balochistan** (With Request to circulate it to all District Education Officers and others concerned)
2. **The Chairman, BTBB** (To do the needful, if any)
3. **The Director BOC** (To do the needful, if any)
4. **All Headmasters/ Headmistresses/ Principals of High Schools affiliated with BBISE**
5. **Data Processing Manager, BBISE** (to make necessary arrangements on the BBISE Portal.)
6. **The Incharge (SSC-Examination, SSC-Result and Conduct Branch) of BBISE**, to make necessary arrangements.

CC:

1. The Secretary, Government of Balochistan, Schools Education Department.
2. The Secretary, Government of Balochistan, Colleges, Higher & Technical Education Department.
3. Additional Secretary (Staff) to the Chief Secretary, Balochistan.
4. The Secretary, BBISE
5. The Controller of Examination, BBISE

(Haroon Khan)
DEPUTY DIRECTOR RESEARCH
BBISE

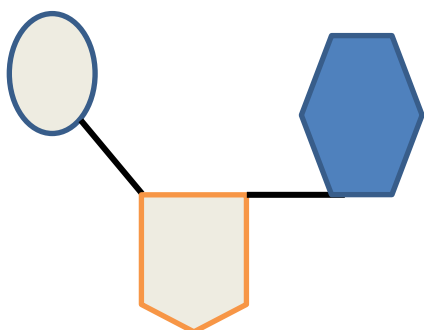
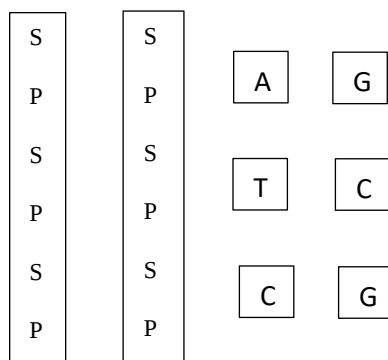
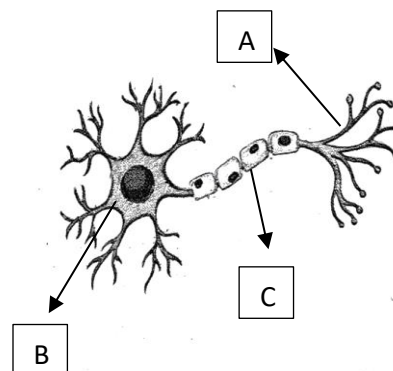


BALUCHISTAN BOARD OF INTERMEDIATE & SECONDARY EDUCATION, QUETTA**TIME: 3 HOURS****SSC (ANNUAL) EXAMINATION, 2027.****MARKS: 60+8=68****Model Paper****SUBJECT: BIOLOGY – 9th****PASSING MARKS:27****Part 1 (1×12=12)****Q 1. Choose the correct answer.**

- The study of basic units of a living body is called: (a) Morphology (b) Histology (c) Pathology (d) Cytology
- Sucrose is found by the combination of: (a) Two glucose (b) Glucose and Fructose (c) Two fructose (d) Maltose and Manose
- The cell membrane of vacuole is called: (a) Protoplast (b) Symplast (c) Apoplast (d) Tonoplast
- In human beings there are 46 chromosomes (2n) what will be the number chromosomes in their gametes? (a) 22 (b) 23 (c) 24 (d) 25
- Which statement is not correct during playing?
 - More heat is produced
 - Increase in blood flow
 - More O₂ is released
 - More CO₂ is released
- The number of ATP molecules obtained from one molecule of glucose in anaerobic respiration are: (a) 2 (b) 3 (c) 4 (d) 5
- The term Tracheophytes is used for: (a) Non-vascular plants (b) Vascular plants
 - Organisms without proper nucleus
 - Those organisms who are not clearly fit into plants and animals
- In plants, food is stored in the form of: (a) Glucose (b) Starch (c) Sucrose (d) Proteins
- Different eye colours in human beings are an example of: (a) Evolution (b) Variation (c) Speciation (d) Hybridization
- The three stages of aerobic respiration are: (a) Glycolysis, fermentation and electron transport chain (b) Glycolysis, pyruvate oxidation and Kerb's cycle (c) Glycolysis, Kerb's cycle and electron transport chain (d) Glycolysis, photosynthesis and Kerb's cycle
- Separation of homologous chromosomes occur during: (a) Prophase-I (b) Metaphase-I (c) Anaphase-1 (d) Telophase - I
- Which of the following is responsible for converting information in DNA to form protein?
 - Messenger RNA (mRNA)
 - Transfer RNA (RNA)
 - Ribosomal RNA (RNA)
 - Small nuclear RNA (SnRNA)

Part 2 (Attempt any Ten Questions 3×10=30)**Q 2. Pen down any Ten answers of the following questions briefly. The length shall not exceed more than 5 points**

- How can you differentiate between qualitative and quantitative observations by a simple example.
- Draw the general structure of an amino acid and label its 3 functional groups.
- Compare the structures of DNA and RNA (any 3 points).
- Write three functions of lysosomes?
- Write any three biological significances of meiosis?
- Differentiate between aerobic and anaerobic respiration with example.
- Explain three major mechanisms of enzyme action.
- Why is it difficult to classify viruses alongside other living organisms?
- What role does magnesium play in the formation of chlorophyll?
- Define cloning and write any two advantages of cloning.
- What are halophytes? Describe two physiological adaptations.
- What was the concept of evolution according to Lamarck's theory?
- What is a muscle cell? Name and describe two types of muscle tissues.

Part 3 (6×3=18)**Attempt all Questions (Each question from the given alternatives separated by “OR”).****Q 3. Malaria in Human beings is spread by female anopheles' mosquito. Explain it using biological method.****OR** What are carbohydrates? Write down the properties of disaccharides and polysaccharide with structures.**Q 4. What is DNA? when it was discovered? Also explain the Watson and Crick model of DNA with diagram.****OR** Write a detailed note on plastids, explaining types with labelled diagrams.**Q 5. Discuss the role of various plants organs in plant physiology. Also draw diagram.****OR** Describe lock and key model and induced fit model for mechanism of enzyme action.**Part 4: Practical Based Assessment (8 Marks)****Q 6. Attempt any two of the following (3×2=6)****1. Label the different components of nucleotide shown below. (1+1+1)****2. Construct the DNA molecule using the given components (1+1+1)****3. Study the given Diagram? Label parts A, B and C as indicated by arrow. (1+1+1)****Q 7. Pen down One of your favourite practicals along with its sketch and application. (1+0.5+0.5=2)**

(PART – A)**Q.1: Choose the correct answer. No cutting , ink remover , erasing or over writing is allowed. (1×12=12)**

- i) Chemistry primarily focuses on the study of: A) living organisms. B) Matter and properties C) celestial bodies D) electrical engineering
- ii) Fog is classified as the type of mixture is: A) Solution B) suspension C) colloid D) Compound.
- iii) Atomic number is defined as the number of: A) Proton B) proton & neutron C) electron D) Neutron
- iv) The charge on cation is: A) Positive B) Negative C) Neutral D) Variable
- v) Molecular formula for Glucose is: A) C₆H₆ B) C₆H₁₂O₆ C) C₆H₁₂ D) CO₂
- vi) in Redox reaction gain of electron is: A) Oxidation B) Reduction C) Both A and B D) None of them
- vii) Minimum amount of energy required to start reaction is: A) Enthalpy B) Transition state C) Energy change D) Activation energy
- viii) The ion responsible for acidic properties of a Solution is: A) OH⁻ B) Cl⁻ C) H⁺ D) Na⁺
- ix) column of elements in periodic table is called: A) Rows B) Groups C) Periods D) Families
- x) The major component of Earth's atmosphere is: A) O₂ B) N₂. C) CO₂ D) Ar
- xi) Hydrocarbon that is C₄H₆ is: A) Alkan B) Alkene C) Alkane D) Aromatic hydrocarbon
- xii) Element present in protein but not in carbohydrates is: A) Carbon B) Hydrogen C) Nitrogen D) Oxygen

(PART – B)**Q.2, Attempt any 10 questions. (3×10=30)**

1) why do we study polymer chemistry give 2 examples? **2)** what is matter and also define 2 states of matter? **3)** why gases are compressible but solids are not given 2 points? **4)** why atoms do not have overall charge give 2 points and 1 example? **5)** Why noble gases do not react give example and structure of He? **6)** Differentiate between Mole and Molar mass give examples? **7)** what is Oxidation number and also write the types with example? **8)** What is exothermic reaction give 2 examples? **9)** Differentiate between static and dynamic equilibrium? **10)** what is PH and how you differentiate PH from 1 to 14? **11)** How you classify elements in to S, P, d, f, blocks? **12)** List 3 harmful effects of acid rain on environment? **13)** what does a structural formula represent? **14)** How DNA and RNA are different give 3 points?

(PART – C)**Attempt all Questions (Each question from the given alternatives separated by “OR”). (6×3=18)****Q3.** Differentiate between the three main states of matter on the basis of shape , volume, compressibility and intermolecular forces?**OR** Differentiate between Element, Compound and Mixture on the basis of Type, size of particles, filtration also give examples of each?**Q4.** Explain the structure of an atom including Nucleus, Shells charge and place or nucleon with example?**OR** Compare ionic , covalent and metallic bonds with respect to their formation and key points any 3 of each?**Q5.** Calculate the number of moles in 39.2 grams of H₂SO₄ (Molar mass of H₂SO₄ is 98g/mol).**OR** What is Redox reaction describe reduction and oxidation with the help of chemical reaction give an example of each ?

(PART – D) Practical Based Assessment (8 Marks)

Q 6. Attempt any two questions each question carries equal marks. Marks: (3x2=6)

1. Observe the given information and answer about the physical and chemical changes? (03)



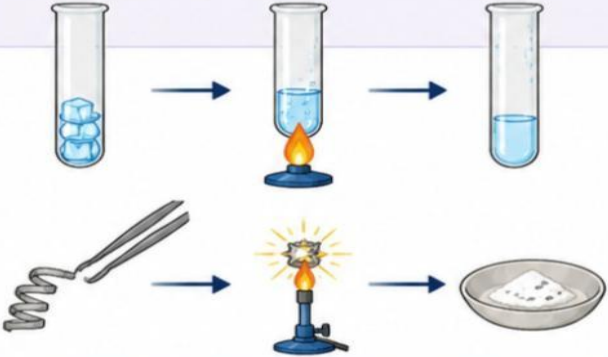
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1

Heat ice in a test tube and observe.

2

Burn a small piece of Mg ribbon and collect the white ash.



- A) Identify the change physical or chemical? (01)
- B) Which is Reversible and why? (01)
- C) Which one is irreversible and why? (01)

2. You are advised to test the acids and base using indicators? (03)

Solution	Litmus Paper (Blue)	Litmus Paper (Red)	Phenolphthalein
HCl (Hydrochloric acid)			
NaOH (Sodium hydroxide)			

- A) The effect of acid on red and blue litmus paper ?(01)
- B) The effect of base on red and blue litmus paper ?(01)
- C) What is the effect of acid and base on indicator ? (01)

3. Use the given data and suggest the techniques for separation and name the mixture? (03)



- A) What technique is used for water and sand separation and why? (01)
- B) What technique is used for salt and water separation and why? (01)
- C) What type of mixture they are? (01)

Q 7. Pen down One of your favourite practicals along with its sketch and application. (1+0.5+0.5=2)

GROUP-I**SUBJECT: PHYSICS – 9TH**

PASSING MARKS: 27

PART – I

- Q.1: Choose the correct answer. Marks will not be awarded by cutting, erasing or using an ink remover. (1 x 12 = 12)**
- (i) Momentum is equal to the product of mass and. (a) force (b) velocity (c) acceleration (d) Distance
- (ii) Bar is a unit of: (a) force (b) area (c) volume (d) Pressure
- (iii) A train is moving at a speed of 36 kmh^{-1} Its speed expressed in ms^{-1} is: (a) 10ms^{-1} (b) 20ms^{-1} (c) 25 ms^{-1} (d) 30ms^{-1}
- (iv) More than 99 percent of the visible universe is (a) solid (b) liquid (c) gas (d) Plasma
- (v) Which one of the followings is not a scalar quantity? (a) distance (b) displacement (c) speed (d) Temperature
- (vi) Which of the following expressions represent the Hooke's law? (a) $F = kx$ (b) $F = k/x$ (c) $F = x/k$ (d) $F = 1/(kx)$
- (vii) The study of matter, energy and their mutual interactions is called: (a) Mechanics (b) Optics (c) Heat (d) Physics
- (viii) The clockwise torque is taken as: (a) positive (b) negative (c) zero (d) More
- (ix) The acceleration due to gravity in the center of earth is: (a) Zero (b) One (c) Two (d) Increase
- (x) An object is moving in a circle. Which of the following quantities may remain constant during its motion? (a) speed (b) velocity (c) acceleration (d) Force
- (xi) Which of the following material is suitable for making a permanent magnet? (a) copper (b) steel (c) Iron (d) Tin
- (xii) The work done will be zero if the angle between the force and the distance is: (a) 0° (b) 45° (c) 90° (d) 180°

PART – II

- Q.2: Write the short answers of the following questions. (Any Ten) (3 x 10 = 30)**
- (i) Differentiate between like and unlike parallel forces? (ii) What is meant by prefixes of femto, hecto and atto?
- (iii) What are the limitations of Hook's law? (iv) What is the direction of centripetal force gives two examples?
- (v) For every action there is always an equal and opposite reactions how? Gives three examples. (vi) A piece of iron floats on the surface of Mercury but sinks in water? Explain. (vii) Write three advantages of wind energy? (viii) In distance-time graph if the object is accelerating what do you conclude from it? Also show in figure. (ix) Write the formulas of Conversion of temperature scales Celsius to Fahrenheit scale Fahrenheit to Celsius scale and Celsius to Kelvin scale?
- (x) Why do we use a sharp knife to cut fruit and vegetables? (xi) Give three examples from daily life involving impulse?
- (xii) Write three properties of magnetic field lines? (xiii) The age of a girl studying in 9th class is 15years. Convert her age into seconds and express this in scientific notation. (xiv) A boy in your class is 1.6m tall. What will be his height in mm and μm ? (xv) What height of vertical column of water will exert a pressure of $4.9 \times 10^5 \text{ Nm}^{-2}$? (xvi) A wooden block of mass 5kg is pushed along a smooth surface of a table with a force of 30N, find the acceleration of the block.

PART – III**Note: Write the detail answer of following questions. Do any three (03)**

(3x6 = 18)

Sketch diagram where needed.**Q.3: State and prove PASCLA'S LAW?****-OR-**

What is meant by motion Motion? Write the types of motion in detail.

Q.4: State and Prove Newton's Second Law of Motion?**-OR-**

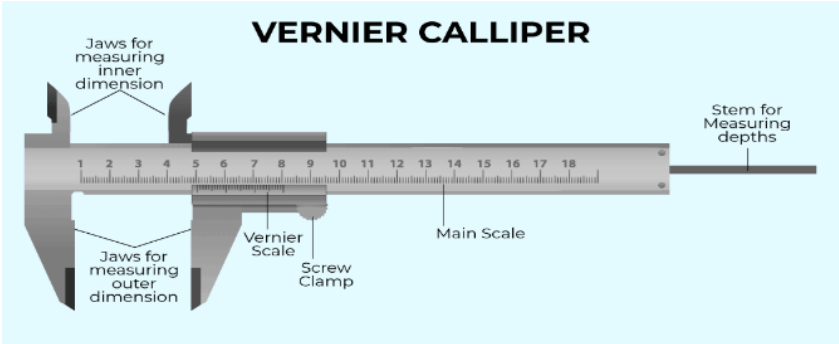
Derive the standard equation of kinetic energy for a particle of mass m.

Q.5: A metallic object of mass 81g has a volume of 30cm^3 . Calculate the density of the density of the object in SI units. Can you identify the meta?**-OR-**The mass equatorial radius of Venus are $4.868 \times 10^{24} \text{ kg}$ and 6052km respectively. Calculate the density of Venus assuming that it is a perfect sphere.**The End**

PRATICAL BASE ASSESSMENT(PBA) (8 Marks)

Q.9: Attempt any Two (02) Questions:(2x3=6)

1 Recall the experiment to measuring diameter of a solid cylinder with a vernier caliper and answer the following questions:



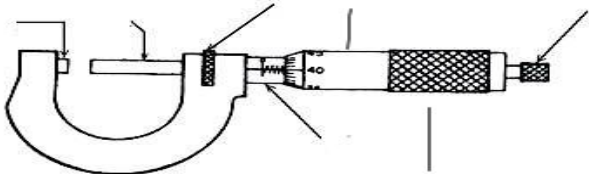
(i) Copy and complete the given table. (2 marks)

Least Count (L.C.) = 0.01 cm
Zero Correction (Z.C.) = 0 cm

No. of Obs.	Complete main Scale reading M (cm)	Vernier division that exactly coincides with any division on main scale n	Fraction to be added B = n x L.C. cm	Reading of Diameter of solid cylinder	
				Observed D1 = M + B cm	Corrected D = D1 ± Z.C.
01	2.3	4			
02	2.3	5			
03	2.3	6			

(ii) What is meant by positive zero error of vernier calipers? (1 mark)

2 (i) Label the diagram of screw gauge correctly? (1 mark)



(ii) Calculate the Mean Diameter (D) of a wire by given data: (1 mark)

D₁ = 0.78mm, D₂ = 0.80mm, D₃ = 0.79mm

(iii) Write the formula of Least Count (L.C) of screw gauge? (1 mark)

3 (i) To find the density of a liquid using 5ml syringe (Instead of Density Bottle)? Copy and complete the given table: (2 marks)



Mass of empty syringe= m₁ = 12g
Room temperature = T = 25 °C

No. of Obs.	Volume of Liquid(V) ml (cm ³)	Mass of syringe with Liquid(m ₂) (g)	Mass of liquid M = m ₁ – m ₂ (g)	Density of Liquid p = M/V gcm ⁻³
01	5	17		
02	5	19		
03	5	16		

(ii) What is density of water of 4°C? (1 mark)

Q 10. Pen down One of your favourite practicals along with its sketch and application. (1+0.5+0.5=2)

Syllabus of Class 9th Subject Biology for Practical Based Assessment & Project Based Assessment

Practical Based Assessment (50% of Practical Marks) (6+2=8) Marks		Project Based Assessment (50% of Practical Marks) 07 Marks
1)	To know the components/ parts of dissecting box and their function.	Making of following different scientific projects by use of cardboard, formic sheets, and glaze paper. • Five Kingdom System • Level of organization in Organisms • Unicellular Organism • Multicellular Organism • Bacteriophage • Plant and Animal Cells • Organelles of Cell • Animal and Plant Tissues • Mitosis • Meiosis • Lock and Key Model • Induced Fit Model • Digestive System • Structure of Root • Structure of Heart • Any other project/model related to the content of 9th grade Note: Along with the awarded marks, complete explanation of the project by the students, dually verified by the school, shall be sent to the board.
2)	Identification of different organs and organ system in a dissected frog.	
3)	To study the distinguishing taxonomic characters of different specimens (preserved/ fresh/ glass embedded) of five kingdom system.	
4)	Microscopic Examination of plant and animal cell by using temporary staining technique such Iodine or Methylene Blue Plant Cell (Onion Epidermis) Animal Cell (Human Cheek Cells)	
5)	To examine the mitosis and meiosis from prepared slides, models and charts.	
6)	Testing of different enzymes working in vitro.	
7)	Investigate the necessity of chlorophyll, light and CO ₂ for photosynthesis.	
8)	Microscopic examination of transverse section of the small intestine.	
9)	Investigation of rate of water loss at the two surfaces of leaf by using cobalt chloride paper.	
10)	a) Identification of internal structure of human heart b) Investigation of effect of physical activity on pulse rate.	
11	Any one of Student's Favorite Practical 2 marks	

Syllabus of Class 9th Subject Chemistry for Practical Based Assessment & Project Based Assessment

Practical Based Assessment (50% of Practical Marks) (6+2=8) Marks		Project Based Assessment (50% of Practical Marks) 07 Marks
1)	Identify and explore the type of bond present in the matter that is solid, liquid and gases ? like metals , salt , co ₂	Prepare project using Low cost or no cost material. • Construction of atomic structure model. • Construct a model on immiscible substances. • Construction of distillation model. • Construction of Green House effect model. • Construction of ozone layers depletion. • Construction of volcanic eruption. • Construction of NaCl bond model. • Construction of model to separate acids and basis. • Construction of Evaporation model. • Construction of model on density. • Construction of model on the states of matter. • Construction of model on systems. • Construction of model on endo and exo thermic system. • Construction of model on colloidal, suspension and mixture.
2)	Test the given substances using litmus paper and separate acids and basis ? like Hcl and NaoH	
3)	Identify and name the process to separate salt from water ? Like filtration, Evaporation, distillation	
4)	Identify the given solution on the basis of their properties as solution, colloidal and suspension? Like water and sand , air, water and salt .	
5)	To identify and separate the given substances as conductor and insulators? Like metals and plastic or wood ,paper	
6)	Identify the chemical substances and write the empirical formula for the given compound ? like sugar and salt are given and ask them to taste then and write their formula and also empirical formula	
7)	Identify the symbols used in chemical equation also name them ? l ,g , aqu , → , dalta , conc, dil,	
8)	Identify the given metals by flame test ? Na, k , Mg	
9)	Identify carbs and protein using scientific methods ?	
10)	To calculate the melting and boiling point of the given substances? Ice to water and water to vapor.	
11	<i>Any one of Student's Favorite Practical</i> 2 marks	<i>Note: Along with the awarded marks, complete explanation of the project by the students, dually verified by the school, shall be sent to the board.</i>

Annex-2

3

Syllabus of Class 9th Subject Physics for Practical Based Assessment & Project Based Assessment

Practical Based Assessment (50% of Practical Marks) 6+2=8 Marks		Project Based Assessment (50% of Practical Marks) 07 Marks
1)	1. To measure the diameter and length of a solid cylinder with vernier calipers 2. To measure the thickness of a metal strip or a wire by using a screw gauge	Mechanics & Motion 1. Newton’s Car Concept: Newton’s 3rd Law, friction Project: Make a balloon-powered car from cardboard + bottle caps. Compete for farthest distance. 2. Pendulum Clock Concept:Simple Harmonic motion Project: Build a pendulum and see how length changes the swing time. Energy & Work 3. Solar Oven from a Pizza Box Concept: Heat transfer, energy conversion Project: Build an oven, measure temp rise, cook marshmallows. Compare black vs shiny interiors. Calculate efficiency. 4. Rubber Band Catapult Concept: Elastic potential energy/ kinetic energy Project: Launch mini marshmallows, measure range vs pull-back distance. Make a graph: potential energy stored vs distance traveled. Pressure, Fluids & Sound 6. Cartesian Diver + Hydraulic Lift Concept: Pascal’s Law, pressure, buoyancy Project: Use syringes + tubing to lift small weights with water. Make a diver in a bottle.Why does a small fore lift the weight? Any other idea/project related to the following:)Vernier Calipers 2)Screw Gauge (Micrometer) 3)Simple Pendulum 4)Distance–Time Graph 5)Speed–Time Graph 6)Newton's First Law of Motion 7)Newton's Second Law of Motion 8)Newton's Third Law of Motion 9) Work , Energy and Power(Conservation of Energy) 10)Magnetic and Non-Magnetic Materials 11) Momentum 12) Pressure 13) Hook's Law 14) Sun, Earth and Moon Note: Along with the awarded marks, complete explanation of the project by the students, dually verified by the school, shall be sent to the board.
2)	3. To find the acceleration of a ball rolling down an inclined angle iron by drawing a graph between 2S and T². 4. To find the value of "g" by free fall method.	
3)	5. Investigate the relationship between force of limiting friction and normal reaction to find the coefficient of sliding friction between a wooden block and horizontal surface. 6. Measure the force of limiting friction by Rolling a Roller on a horizontal plane.	
4)	7. To determine the resultant of two forces graphically using a horizontal force table. 8. To find the unknown weight of an object by using the vector addition of forces.	
5)	9. To verify the principle of moments by using a metre rod balanced on a wedge. 10. To find the unknown weight of an object by using principle of moments.	
6)	11. To find tension in the strings by balancing a metre rod on the stands. 12. Determine the position of centre of gravity of a plane (thin) lamina using plumb line.	
7)	13. Determine the volume of irregular shaped insoluble stone by displacement method and calculate its density. 14. To study the relationship between load and extension for a Helical spring by drawing a graph.	
8)	15. To find the density of a liquid using 5 ml syringe (instead of density bottle). 16. To determine the density of an irregularly shaped solid object.	
9)	17. To determine the density of given liquid 18. To trace the magnetic field of bar magnet using a compass needle.	
10)	19. To draw a graph between temperature and time when ice is converted into water and then into steam by slow heating.	
11	Any one of Student’s Favorite Practical 2 marks	