

# NEW STANDARD ACADEMY

Semri Kothi Super Market, Raebareli

CLASS 10 (Academy) 19-05-2025

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## PHYSICS

1. What kind of lens can form a virtual erect and magnified image?
2. A ray of light is passing through the principal focus of a convex lens . How will it emerge after refraction through the lens?
3. An object is placed on the left side of a lens (having 10cm focal length ) at a distance of 20 cm. What will be the sign of the object distance?
4. How will you distinguish a concave lens by holding in hand and looking the printed page through it?
5. An object is brought from infinity to the optical centre of a convex lens. List the change in focal length.

## CHEMISTRY

1. What do you mean by Indicator's
2. What are the acids .write any four characteristics of acids
3. What are the colours indicator's ? give example with their colour change (two – Natural a two –synthetic)
4. Give two –two examples of Inorganic and organic acids
5. Write the chemical – formula of the following
  - (i) Formic acid
  - (ii) Butyric acid
  - (iii) Lactic acid
  - (iv) Tartaric acid

## BIOLOGY

1. Which instrument can record its electrical changes during heart beat.
2. What is the range of normal blood pressure also give the name of instrument which measure blood pressure
3. What is the joint diastole
4. How blood clotting takes place in human explain it
5. Define heart sound.

## MATH

1. Divya deposited ₹1000 at compound interest at the rate of 10% per annum. The amounts at the end of first year, second year, third year ,... form an AP. Justify your answer.
2. Find the AP whose nth term is  $3n-5$
3. Check whether 304 is term of the list of numbers 5,11,17,23,...
4. Which term of the AP:3,15,27,39,... will be 120 more than its 21<sup>st</sup> term?
5. Which term of the AP:12,117,113,... is the first negative term?