CLASS-10 PHYSICAL SCIENCES

NEW TEXT BOOK

2014 - 2015

CHAPTER: 03 – REFLECTION OF LIGHT BY DIFFERENT SURFACES

PERIOD PLAN-08:

Ray diagram for reflection in concave mirror Place of object and place of image

Real and virtue images

Content Analysis	Class Room Environment	Teaching Learning Material (charts having the diagrams / Use black board to draw them))
Useful rays to draw ray diagrams:	Conversation:	(i)
(i) All rays that are parallel to the axis get reflected such that they pass through the	about the useful rays to draw ray diagrams	
(ii) A ray that passes through the focal point of the mirror will travel parallel to the axis after reflection	Explanation: How to draw ray diagrams.	(ii)
(iii) a ray coming from the tip of the object going through the centre of curvature to		
meet the mirror, it will get reflected along the same line. nagamurthy.weebly.com (iv) Along with these three Rays 'the ray		(iii) C
the pole of the mirror' is also useful in drawing ray diagrams. For this ray, the principal axis is the normal.		(iv)
Ray diagram for reflection in concave	Conversation: About	
mirror & Place of object and place of	the places of object for	
image Real and virtue images	concave mirror.	
(i) Object at infinity: The image formed	Explanation: to draw	
on Focus (F). The image is real, inverted	the ray diagrams for	P
and diminished. It is point size image.	concave mirrors.	
(ii) Object between infinity and centre of		► È
<u>curvature</u> : The image is formed between		P
focus and centre of curvature. The image is		L C F
(iii) Object at centre of curvature: The		
image is formed at centre of curvature. The		L F.
image is real, inverted and equal size to		C F L
that of object.		
(iv) Object between centre of curvature		- E
and focus: The image is formed beyond		P
the centre of curvature. It is real, inverted		F F
and enlarged.		E E
(v) Object at Focus: The image is formed		
at infinity. The image is real, inverted and		P
highly enlarged.		T E
(vi) Object between focus and pole: The		E
image is formed behind the mirror. It is		
virtual, erect and enlarged.		L F

Prepared by : V.NAGA MURTHY - 9441786635 Contact at : nagamurthysir@gmail.com Visit at : nagamurthy.weebly.com