MID TERM EXAMINATION

APRIL/MAY 2018

CLASS X

Marking Scheme – SCIENCE [THEORY]

Q.NO.	Answers	Marks (with split up)
1.	Nature: virtual Size: magnified	½ ½
2.	CHE	
3.	CHE	
4.	BIO	
5.	BIO	
6.	(i) convex mirror as it provides virtual erect and diminished image , wider field of view (ii) concave mirror as it converges light rays to a point. OR (i) concave mirror, m=-1 indicates real same sized image (ii) zero cm, as the image and object are at the centre of curvature. (ii)2f = -50 cm f= -25 cm	1½ 1½ ½ + ½ 1 1
7.	H_o = 2 cm u = -25 cm f = -15 cm 1/v +1/u =1/f V=-37.5 cm Nature : real H_i/h_0 = v/u H_i = -2.5 cm	 ½ ½ ½ ½ ½ ½
8.	(i) RI can't be less than one. Light travels with maximum speed in vacuum (ii) the ratio of speed of light in vacuum to that in water is 1.33. (iii)In medium A , lesser RI lesser will be the optical density and more will be speed.	½ +½ 1 1

9.	(i) laws of refraction	2
	(ii) no unit	1
10.	CHE	
11.	CHE	
12.	CHE	
13.	BIO	
14.	BIO	
15.	BIO	
16.	(i) 0 t0 20 cm{object between F and P}	1
	(ii) ray diagram for object b/w F and P of concave mirror	2
	(iii) virtual , erect	1
	(iv) image beyond C	1
17.	(i) ray diagram –refraction of light through glass slab	2
	(ii) lateral displacement definition; two factors	2
	(iii) opposite sides parallel so extend of bending on both sides are equal and opposite	1
18.	CHE	
19.	CHE	
20.	BIO	
21.	BIO	
22.	Ray diagram	1
	Definition : Focus of concave mirror	1
	OR	
	two points of differences between real image and virtual image.	2
23.	Concave mirror	1
	Focal length = - 30 cm	1
24.	CHE	
25.	CHE	
26.	BIO	
27.	BIO	