Assiut University Faculty of Science Department of Physics



Undergraduate Final Exam 1<sup>st</sup> semester



Course: *Biophysics* Code: P323 Time: 3 Hours Date:24/01/2024

<u>The exam is in 3 pages (50 degree)</u>	
st question: Choose the correct answer:	(30 Marks)
1)is a transparent layer forming the front of t	he eye, covered with a film of tears and
has a radius of curvature $r \cong 8 \text{ mm}$	
A. Pupil B. Cornea	C. Retina D. Fovea
2)is one of the sight defects that suffer from w	veakness of power of accommodation
A. Myopia B. Hypermetropia	C. Presbyopia D. Astigmatism
3) Which one of these statements corresponding to incorrect?	the compound microscope is
<ul> <li>A. The object is just outside the focal length of the i.e., f<sub>1</sub><x<2f<sub>1.</x<2f<sub></li> </ul>	objective lens (a real image is formed)
B. The image from the objective lens falls just insid	le the eyepiece focal length and a
virtual image is formed by the eyepiece i.e., $\theta < X$	<i>sf</i> <sub>2</sub> .
C. The focal lengths of the two lenses do not overla	up i.e. $d > f_1 + f_2$ .
D. It consists of a convex lens of short focal length	with the object placed closer than the
focal point i.e., 0 <x<f.< td=""><td></td></x<f.<>	
4) Which one of these statements corresponding to incorrect?	Golden Rules for Refraction is
A. All rays and the normal lie in the same plane.	approximation and approximate and approximate a spectra of the second second second second second second second
B. The refracted ray in the second medium is bent to versa.	toward the normal if v2 <v1 and="" td="" vice<=""></v1>
C. The lowest index of refraction, the lowest the opt	tical density.
D. The angle between the incident ray and the norm	nal is equal to the angle between the
refracted ray and the normal	
5) The critical angle for the diamond-air boundary.	(for diamond n=2.42)
A. 20.4° B. 42.4° C	. 24.4° D. 2.44°

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Best wishes

Dr. Yasmin Mohamed Yousef Bakier.