



<b>Q-4</b>	<b>Attempt all questions</b>	<b>(14)</b>
a	Give the differences between dispersive and resolving power of a grating.	7
b	Explain the Action of Zone Plate with suitable diagram.	7
<b>Q-5</b>	<b>Attempt all questions</b>	<b>(14)</b>
a	Give the expression for resolving power of a prism, also mention the terms appearing in the same. How can you improve the resolving power of a telescope?	3
b	How is interference different from diffraction?	4
c	Describe Huygens theory of propagation of wave front in detail with neat diagrams.	7
<b>Q-6</b>	<b>Attempt all questions</b>	<b>(14)</b>
a	Explain in detail Rayleigh's Criterion for resolution using suitable figures.	7
b	Explain in detail Fresnel's theory of rectilinear propagation of light with figures	7
<b>Q-7</b>	<b>Attempt all questions</b>	<b>(14)</b>
a	Give the properties of ether	2
b	Give two points of differences between prism spectrum and grating spectrum	4
c	Give an account on Fraunhofer diffraction by double slit method using figures required.	8
<b>Q-8</b>	<b>Attempt all questions</b>	<b>(14)</b>
a	Differentiate between Transparencies and Transmission grating.	2
b	Explain Huygens Principle with necessary diagrams.	8
c	What do you mean by resolving power of a microscope? Draw the resultant intensity curve for two objects whose change in wavelength is very small.	4

