PHYSICS 535/1

Itemo.	Element of construct	Topics covered	Term	Class
<u> </u> K	SEC	CTION A: Compulsory		
Itemsone www.mutoonline	LIGHT AND WAVES	Nature of light; reflection of light at plane surfaces	3	S.1
		Reflection of light at curved surfaces	2	S.2
		Refraction, dispersion, and colour	1	S.3
		Lenses and optical instruments	2	S.3
		General wave properties	2	S.3
Φ •		Sound waves	2	S.3
17.3				
Item Two	Atomic and Nuclear	Atomic models	2	S.4
	Physics	Nuclear processes	3	S.4
Item	Stars, Galaxies (Earth & Space Physics) & Digital Electronics	The solar system	3	S.2
Three		Stars and galaxies	3	S.3
		Satellites and communication	3	S.3
		Digital electronics	3	S.4
		SECTION B:		
		PART 1		
Item four	Mechanics and Heat	Measurements in Physics	1	S.1
and Five		> States of matter	2	S.1
		> Effects of forces	2	S.1
		Work, energy, and power	1	S.2
		 Turning effect of forces, centre of gravity, and stability 	2	S.2
		Pressure in solids and fluids	2	S.2
		 Mechanical properties of Materials and Hooke's law 	2	S.2
		Linear and non-linear motion	1	S.3
		> Temperature measurements	2	S.1
		> Heat transfer	3	S.1
		 Expansion of solids, liquids, and gases 	3	S.1
		Heat quantities and vapours	3	S.3

PART 11			
Magnetism and	Magnets and magnetic fields	3	S.2
Electricity	Electromagnetic effects	1	S.4
	> Electrostatics	3	S.2
	Introduction to current electricity	1	S.4
	Voltage, resistance and Ohm's law	1	S.4
	 Electric energy distribution and consumption 	2	S.4
	O	Magnetism and Electricity Magnets and magnetic fields Electromagnetic effects Electrostatics Introduction to current electricity Voltage, resistance and Ohm's law	Magnetism and Electricity > Magnets and magnetic fields 3 > Electromagnetic effects 1 > Electrostatics 3 > Introduction to current electricity 1 > Voltage, resistance and Ohm's law 1

NOTE:

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- > Section A will comprise of three compulsory items
- > Section B comprises of Part I and Part II each having two questions and a learner answers one question from each part.
- ➤ In total five questions must be attempted by the learner.
- ➤ The paper is for 2 hours 30 minutes

PHYSICS 535/ 2&3

Item	Element of Construct	Sections
Item One or Two	Scientific Investigation	> Mechanics
		> Optics
		> Electricity

NOTE:

- > The exam duration is 2 hours.
- > There are two examination items in this paper.
- > Students select one item from the options provided.
- > The two items can cover either Mechanics and Electricity, Electricity and Optics or Mechanics and Optics.
- Teachers are required to teach all three sections: Mechanics, Heat, Electricity, and Optics .Avoid focusing solely on specific topics to ensure students are competent across all areas, as they will need this knowledge in real-life applications.