

2024-2025
S.4 PHYSICS
Syllabus on Half Year Examination

Date: 13.01.2025
8:30 am -10:00 am

Revision material:

1. Textbook
2. Worksheet
3. UT Paper

Exam coverage

Section 1 Heat & Gas

		MC	LQ
Ch.1 Temperature and Thermometer	Temperature-dependent properties Calibration of Thermometer (in Celsius)	2	1
Ch.2 Heat and Internal Energy	Setup of measuring of specific capacity of material difference between the experimental value and the standard value	2	1
Ch.3 Change of State	Heating Curve and Cooling Curve Latent heat of fusion & vaporization Melting point & boiling point Evaporation	2	1
Ch.4 Heat Transfer	Reduce heat lost by conduction and radiation	2	1
Ch.5 Gas Law and Kinetic Theory	Volume and temperature relationship Assumption of ideal gas in kinetic theory Explain Gas law by using the kinetic theory Root-mean-square speed	4	1

Book 3A Wave motion I

Ch.1 Reflection	Draw the reflection diagram to show the image formed by plan mirror Diffuse reflection and regular reflection	4	11
Ch.2 Refraction	Draw the Refraction diagram to find out the refractive index of material Real depth and Apparent depth Total internal reflection Application in Total internal reflection	4	1

Exam paper format (As same as DSE Examination paper 1)

Examination format:

<u>Component</u>	<u>Weighting</u>	<u>No. of Question</u>	<u>Duration</u>
Multiple choice	30%	20Q	90 mins
Structural Questions	70%	7Q	

Stationery: Pen, Pencil, eraser, ruler, calculator.

2024-2025
S.5 PHYSICS
Syllabus on Half Year Examination

Date: 15.01.2025
8:30 am -10:30 am

Revision material:

1. Textbook / Notes
2. UT Paper
3. Worksheet

Exam coverage

Section 1 Heat & Gas

	MC	SQ	LQ
Ch.1 Temperature and Thermometer	1	1	
Ch.2 Heat and Internal Energy	1		1
Ch.3 Change of State	1		
Ch.4 Heat Transfer	1		
Ch.5 Gas Law and Kinetic Theory	2	1	

Book 3A Wave motion I

Ch.1 Reflection	1		
Ch.2 Refraction	1		
Ch.3 Lens	1	1	

Book 3A Wave motion I

Ch.4 The nature of Wave	1	1	
Ch.5 The properties of Wave	3		
Ch.6 Light	1	1	1
Ch.7 Sound	2		

Book 5 Radioactivity and Nuclear Energy

Ch.1 Radiation and Radioactivity.	3	1	1
Ch.2 Atomic Structure and Radioactive Decay	3	1	
Ch.3 Nuclear Energy	3		

Exam paper format (As same as DSE Examination paper 1)

MC (25 Qs)

Structural Question (SQ 7Qs LQ 3Qs)

Examination format:

<u>Component</u>	<u>Weighting</u>	<u>No. of Question</u>	<u>Duration</u>
Multiple choice	30%	25Q	60 mins
Structural Questions	70%	7Q	

Examination coverage

S4:S5 = 30%: 70%

Duration: 2hrs

Stationery: Pen, Pencil, eraser, ruler, calculator.