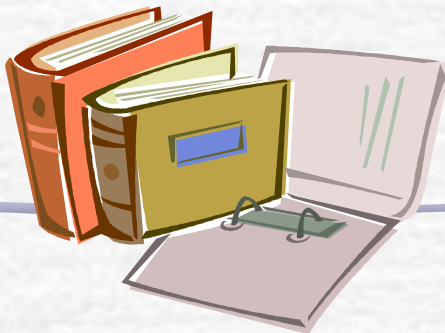


# **NSS PHYSICS**

## **Public Assessment & Standards-referenced Reporting**

Curriculum Development Institute, EDB  
and

Hong Kong Examinations and  
Assessment Authority



**HONG KONG DIPLOMA OF SECONDARY EDUCATION (HKDSE)  
&  
HONG KONG ADVANCED LEVEL (HKAL)**

	<b>HKDSE</b>	<b>HKAL</b>
Sep 09 to Jun 10	S4	-
Sep 10 to Jun 11	S5 (SBA starts)	F6
Sep 11 to Jun 12	S6 (2012 First Exam)	F7 (Last Cohort Exam)
Sep 12 to Jun 13	S6 (2013 Exam)	F7 repeaters (Last Exam)

# Physics



Papers	Sections	Topics examined	Questions
Paper 1 (2.5 hours)	Section A (21%)	Compulsory part (Topics 1-5)	36 M.C.
	Section B (39%)	Compulsory part (Topics 1-5)	conventional questions (84 marks)
Paper 2 (1 hour)	20%	Elective part Topics 6-9 <sup>#</sup>	8 M.C. + 1 structured question (10 marks) per Elective
SBA	20%		
Total	100%		

# May include contents of Topics 1-5

# Combined Science (Physics Part)

Questions	Sections	Papers
24 M.C.	Section A (14%)	One paper only (1 hour 40 mins)
conventional questions (56 marks)	Section B (26%)	
	10%	SBA
	50%	Total



Public Assessment

# Sample Paper : Paper 1 (Compulsory part)

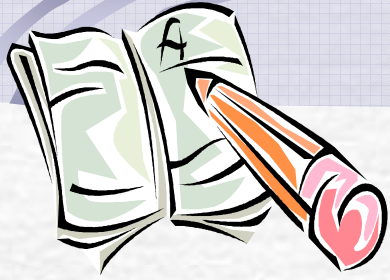


## Section A – M.C. (21%)

- ☛ Selection - 23 CE M.C. + 13 AL M.C. = 36 M.C.
- ☛ 5 out of 36 M.C. involve extension part

## Section B – Conventional Questions (39%)

- ☛ CE Qu. : 1, 2, 5, 6, 7, 9, 12, 13, 14 (50M)
- ☛ AL Qu. : 3, 4, 8, 10, 11 (34M)
- ☛ 26M out of 84M involve extension part



## **Sample Paper: Paper 2 (Elective part)**

**Each Section/Elective contains**

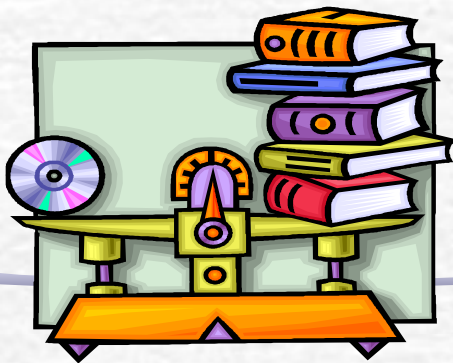
**8 M.C. (5%)**

**1 structured question  
(5%/10 marks)**

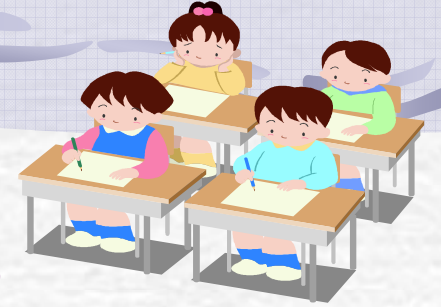
**Answer questions on any 2  
out of 4 Electives**

# Pilot Testing of Sample Paper

- In June 2007, 5 schools, 143 F.6 students participated
- Combined Science (Physics part : X/2) used  
Time : 1 hour 40 minutes  
[24 M.C. + 10 questions (56 marks)]



# Pilot Testing results



	<b>Section A : M.C.</b>	<b>Section B : Conventional questions</b>
Mean	<b>16.4 / 24 = 68%</b>	<b>26.3 / 56 = 47%</b>
SD	<b>3.8 / 24 = 16%</b>	<b>10.1 / 56 = 18%</b>
Paper Max.	<b>Sections A + B : 204 marks</b>	
Mark range attained	<b>30 – 183 marks (15% - 90%)</b>	



# Standards-reference Reporting (SRR)

The standard in terms of figures :

## At present

HKCE

HKAL

## Candidature

~35 000

~11 000

## Results

E+ : 77%  $\approx$  27000

C+ : 24%  $\approx$  2600

A+ : 3.7%  $\approx$  400

## Estimation

HKDSE

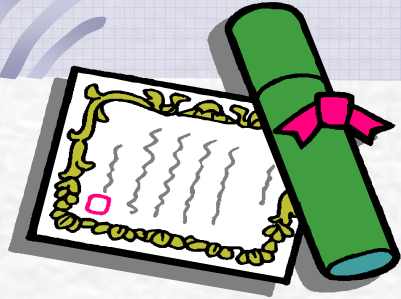
## Candidature

~ 25000

## Mapping (approx.)

levels 4 & 5 will be set with reference to the standards achieved by students awarded grades A-D in the current HKALE





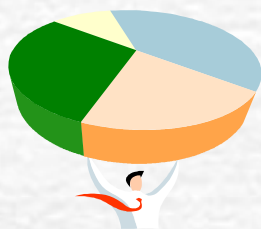
## The 5 Levels of SRR

- A panel of judges (experienced teachers, markers, examiners and university colleagues, etc.) determine the boundaries between levels with reference to
  1. Level descriptors
  2. Previous CE & AL results (**only for pilot testing**)
- Annotated students' samples were selected to illustrate **typical** performance at each level.

# NSS Physics School-based Assessment (SBA)



SBA Tasks			
<b>Weighting</b>	<b>20% of Public Assessment</b>		
<b>Mode</b>	<b>Practical Related</b>	<b>Non-practical</b>	
<b>Task type</b>	<b>Experiment (12%) From 2012 onwards</b>	<b>Investigative Study (6%) From 2014 onwards</b>	<b>Assignment (2%) From 2014 onwards</b>
<b>Task code</b>	<b><u>EXPT</u></b>	<b><u>IS</u></b>	<b><u>ASSN</u></b>

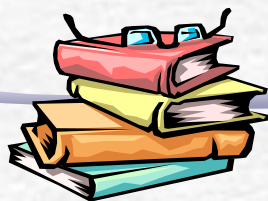


SBA Requirements

# NSS Physics (SBA)

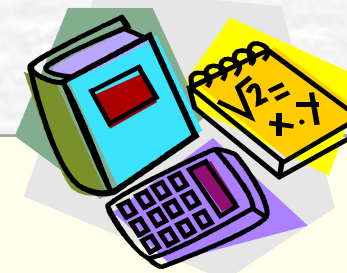


SBA requirements					
Minimum Numbers of assessments on SBA tasks					
	EXPT		IS (2014 Exam)	ASSN (2014 Exam)	Learning & Teaching requirements in SBA Total number of experiments
<b>S6</b>	<b>1</b>	<b>3*</b>	<b>1</b>	<b>1</b>	<b><math>\geq 8</math></b>
<b>S5</b>	<b>1</b>				
<b>S4</b>					<b><math>\geq 6</math></b>



\* The min. no. of assessment will be changed back to 2 in the 2014 Exam.

# NSS Combined Science (Physics Part) School –based Assessment



## SBA REQUIREMENTS

Minimum Number of assessments on SBA tasks			Learning & Teaching requirements in SBA
	EXPT	ASSN (2014 Exam)	
Weighting	7%	3%	Total number of experiments
S6	1	1	≥4
S5	1		
S4			≥3

**Note:** If schools prefer to have IS (8 hours curriculum time provided), it can be counted as 1 EXPT.



## Coming NSS documents

1. SRR booklets with sample papers	Mar – Jun 09
2. SBA handbook	Jun 09
3. SBA sample tasks and assessment criteria	Jun – Sep 09