

Guidance on the use of past paper questions for Higher Physics

The Curriculum for Excellence Higher Courses draw on the strengths of popular areas of study from the existing Higher, with the introduction of some new content. The purpose of this support document is to help centres and departments to identify suitable past paper questions/items that could be used, or possibly amended, to support learners in their preparation for sitting question papers (exams) as part of the Higher Course assessment. The advice in this document reflects questions selected from 2009 to 2013 [past papers](#). If you click on the highlighted links in the columns below, this will take you to the relevant past paper.

When utilising any past paper questions, you need to take into account the following:

- ◆ You must select questions that provide the learners with the same level of challenge as those in the Higher Specimen Question Paper.
- ◆ You may be able to use questions as published or with amendments as suggested in the columns below.
- ◆ You must use questions that adhere to the Higher General Marking Principles and reflect the form of detailed Marking Instructions as published in the Higher Specimen Question Paper.

If any change to a question/items is necessary, you must ensure that:

- ◆ The style and structure matches the Specimen Question Paper for Higher
- ◆ Marking of the learner's response to the question adheres to the General Marking Principles in the Higher Specimen Question Paper
- ◆ Marking Instructions are amended to reflect the style of the Higher detailed Marking Instructions.

The details below should be read in conjunction with the relevant:

Mandatory documentation:

- ◆ Course Specification
- ◆ Unit Specifications
- ◆ Course Assessment Specification

Advice and guidance:

- ◆ Course and Unit Support Notes

Assessment:

- ◆ Question Paper Component:
 - general assessment information
 - general marking principles and detailed marking instructions

Related Information as provided in the relevant N5-Higher Course Comparison Document.

Key for the section below:

C — amend context as required

S — amend source as required

St — amend question style

Str — amend structure of the question

Not all topics/areas of study will appear every year due to the sampling techniques used in producing question papers.

Information from the Course Assessment Specification Each Section of the question paper will be made up of restricted/extended response questions. Questions will sample the knowledge and understanding and apply skills described in the Further mandatory information on Course coverage section.	The columns below identify additional support questions from Higher and Revised Higher Past Papers 2011 to 2013.	
	Higher	Revised Higher
	Use question as published	Use question as published
Our Dynamic Universe		
Motion — equations and graphs	2013 Q 21 a,b 2011 Q21 a,b 2011 Q25 c	2013 Q 21 a,b
Forces, energy and power	2010 Q21 b 2010 Q23 b	2013 Q 21 c 2012 Q 24 2012 Q 25 a,b
Collisions, explosions and impulse	2013 Q 23 a,b,c 2011 Q 22 a,b 2010 Q22 a,b 2010 Q23 a 2009 Q22 a,b	2013 Q 22a,b,c,d
Gravitation	2013 Q 22 a,b 2012 Q 22 a,b) 2009 Q21 a,b,c,d	2012 Q 21 a,b 2012 Q 33 a,b,c,d
Gravity and mass		2013 Q23
Special relativity		2013 Q24 a,b,c,d
The expanding Universe		These topic have not appeared in recent past papers due to sampling requirements.
Hubble's law		
Expansion of the Universe		
Big bang theory		2013 Q 25 a,b 2012 Q 22 a,b,c 2012 Q 23 a,b,c

Particles and Waves		
The standard model		2012 Q 26 a,b,c,d
Forces on charged particles	2012 Q 23 a,b,c)	2013 Q 26 a,b,c 2012 Q 23 a,b,c
Nuclear reactions	2013 Q 31 a 2011 Q30 a 2010 Q30a,b 2009 Q30 a	
Wave particle duality	2013 Q 30 b(ii),b(iii) 2011 Q29 a,b 2010 Q29 a,b 2009 Q29 a,b	2013 Q 31 c 2012 Q 28
Interference and diffraction	2013 Q 28 a,b 2012 Q 29 a,b,c 2010 Q27a,b 2010 Q29 c,d 2009 Q27 a,b,c	2013 Q 28 a,b 2012 Q 27 a,b,c
Refraction of light	2013 Q 29 a,b,c 2012 Q 28 a,b,c 2011 Q27 a,b 2009 Q28 b	2013 Q 29 a,b,c 2012 Q 29 a,b,c
Spectra	2013 Q 30 a,b(i) 2012 Q 30 c 2011 Q30 b 2009 Q28 a 2010 Q28b (amend structure of the question)	2013 Q 27 2012 Q30 a,b,c
Electricity		
Monitoring and measuring a.c	2013 Q26 a,b,c 2010 Q26 a,b 2009 Q25 a	
Current, potential difference, power and resistance	2012 Q 27 a 2010 Q25 a	

Electrical sources and internal resistance	2013 Q25 a,b 2012 Q 25 a,b 2011 Q 24 a,b 2010 Q30 d	2013 Q30a,b 2012 Q31 a,b
Capacitors	2013 Q27 a,b,c 2012 Q 26 a,b,c 2011 Q25 a,b 2010 Q24 b	2012 Q32 a,b,c
Conductors, semiconductors and insulators		2013 Q31 a
p-n junctions	2012 Q 30 a,b	2013 Q31 b

Resources

Additional Higher assessment support material is available here:

Education Scotland

www.educationscotland.gov.uk/

Glow

www.educationscotland.gov.uk/usingglowandict/

Glow Log-in

<https://secure.glowscotland.org.uk/login/login.htm>

SQA past papers

www.sqa.org.uk/pastpapers/findpastpaper.htm