(G) Physics

1. Aims
   Provide physics-related learning experiences for students to develop scientific literacy, so that they can participate actively in our rapidly changing knowledge-based society, prepare for further studies or careers in fields related to physics, and become lifelong learners in science and technology.

2. Curriculum Framework
   This curriculum consists of compulsory and elective parts. The compulsory part covers a range of content that enables students to develop understanding of fundamental principles and concepts in physics, and scientific process skills. The following topics: “Heat and Gases”, “Force and Motion”, “Wave Motion”, “Electricity and Magnetism” and “Radioactivity and Nuclear Energy” should be included.

   To cater for the diverse interests, abilities and needs of students, an elective part is included in the curriculum. The elective part aims to provide in-depth treatment of some of the compulsory topics, an extension of certain areas of study, or a synthesis of knowledge, understanding and skills in a particular context. Topics suggested in the elective part are: “Astronomy and Space Science”, “Atomic World”, “Energy and Use of Energy” and “Medical Physics”.

   To facilitate the integration of knowledge and skills, students are required to conduct an investigative study relevant to the curriculum. A proportion of the lesson time will be allocated to this study.

3. Public Examinations
   (i) Paper 1 Compulsory Part 60% 2.5 hours
   (ii) Paper 2 Elective Part (a choice of two out of four elective topics) 20% 1 hour
   (iii) School-based assessment (SBA) 20%

   Various kinds of items, including multiple-choice questions, short questions, structured questions and essays, will be used to assess students’ performance in a broad range of skills and abilities. Multiple-choice questions permit a more comprehensive coverage of the curriculum, while basic knowledge and concepts can be tested through short questions. In structured questions, candidates may be required to analyse given information and to apply their knowledge to different situations. Finally, essay questions allow candidates to discuss issues in physics in depth and demonstrate their ability to organise and communicate ideas logically and coherently. Specimen papers will be provided to schools by the HKEAA to illustrate the format of the examination and the standards at which the questions are pitched.