

**OXFORD CAMBRIDGE AND RSA EXAMINATIONS  
AS GCE  
F732/01**

**GENERAL STUDIES  
The Scientific Domain  
MONDAY 6 JUNE 2016: Afternoon  
DURATION: 1 hour  
plus your additional time allowance  
MODIFIED ENLARGED 24pt**

<b>Candidate forename</b>		<b>Candidate surname</b>	
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<b>Centre number</b>						<b>Candidate number</b>				
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**Candidates answer on the Question Paper.**

**OCR SUPPLIED MATERIALS:**  
**None**

**OTHER MATERIALS REQUIRED:**  
**Scientific calculator**

<b>A calculator may be used for this paper</b>
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**READ INSTRUCTIONS OVERLEAF**

# **INSTRUCTIONS TO CANDIDATES**

**Write your name, centre number and candidate number in the boxes on the first page. Please write clearly and in capital letters.**

**Use black ink. HB pencil may be used for graphs and diagrams only.**

**Answer ALL the questions in Section A and ONE question in Section B.**

**Read each question carefully. Make sure you know what you have to do before starting your answer.**

**Write your answer to each question in the space provided. If additional space is required, you should use the lined page(s) at the end of this booklet. The question number(s) must be clearly shown.**

# **INFORMATION FOR CANDIDATES**

**The number of marks is given in brackets [ ] at the end of each question or part question.**

**The total number of marks for this paper is 60.**

**You are advised to divide your time equally between Sections A and B.**

**The quality of your written communication will be assessed, including clarity of expression, structure of arguments, presentation of ideas, grammar, punctuation and spelling.**

**Any blank pages are indicated.**

## **SECTION A**

**Answer ALL of the questions in this section.**

**1 TABLE 1 opposite shows an extract from a train timetable between London Euston and Manchester Piccadilly.**

**(a) (i) At what time does the first train from Milton Keynes Central arrive at Manchester Piccadilly?**

\_\_\_\_\_ **[1]**

**(ii) How long does the journey take?**

\_\_\_\_\_ **[1]**

**TABLE 1**

<b>LONDON EUSTON</b>	<b>12:40</b>	<b>13:00</b>	<b>13:20</b>	<b>13:40</b>	<b>14:00</b>	<b>14:20</b>
<b>Milton Keynes Central</b>	–	–	<b>13:50</b>	–	–	<b>14:50</b>
<b>Stoke-on-Trent</b>	–	<b>14:25</b>	<b>14:48</b>	–	<b>15:25</b>	<b>15:48</b>
<b>Macclesfield</b>	–	<b>14:41</b>	–	–	<b>15:41</b>	–
<b>Crewe</b>	<b>14:11</b>	–	–	<b>15:11</b>	–	–
<b>Wilmslow</b>	<b>14:27</b>	–	–	<b>15:27</b>	–	–
<b>Stockport</b>	<b>14:37</b>	<b>14:56</b>	<b>15:17</b>	<b>15:37</b>	<b>15:56</b>	<b>16:17</b>
<b>MANCHESTER PICCADILLY</b>	<b>14:49</b>	<b>15:07</b>	<b>15:28</b>	<b>15:49</b>	<b>16:07</b>	<b>16:28</b>

**(iii) A student needs to travel from London to arrive at Keele University by 4.30 pm. He will need to take a train from London Euston to Stoke-on-Trent. He will then need to take a bus to Keele University. It takes five minutes to walk from the railway station to the bus. Buses leave Stoke-on-Trent railway station to Keele University at 10, 20 and 50 minutes past each hour and this journey takes 40 minutes.**

**Using this information and Table 1 give the precise travel details of the student's journey. It should start with the latest train that he can catch from London Euston, and end with the time he will arrive at Keele University. [2]**

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**(iv) The distance between two cities by train is 350 km. The journey takes 2 hours 15 minutes. What is the average speed of the train?**

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**[3]**

**(b) A survey has been commissioned to gather the views of passengers about the punctuality of train services to and from London Euston. This information will be collected between 8.30 am and 9.30 am on a weekday. Outline THREE reasons why the survey might prove to be unreliable.**

**[9]**

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**2 FIGURE 1 opposite shows the percentage of four different age groups and their purchases over the internet in 2014.**

**(a) (i) Name TWO categories of internet purchases that 10% more of the 25–34 age group bought compared to the 16–24 age group.**

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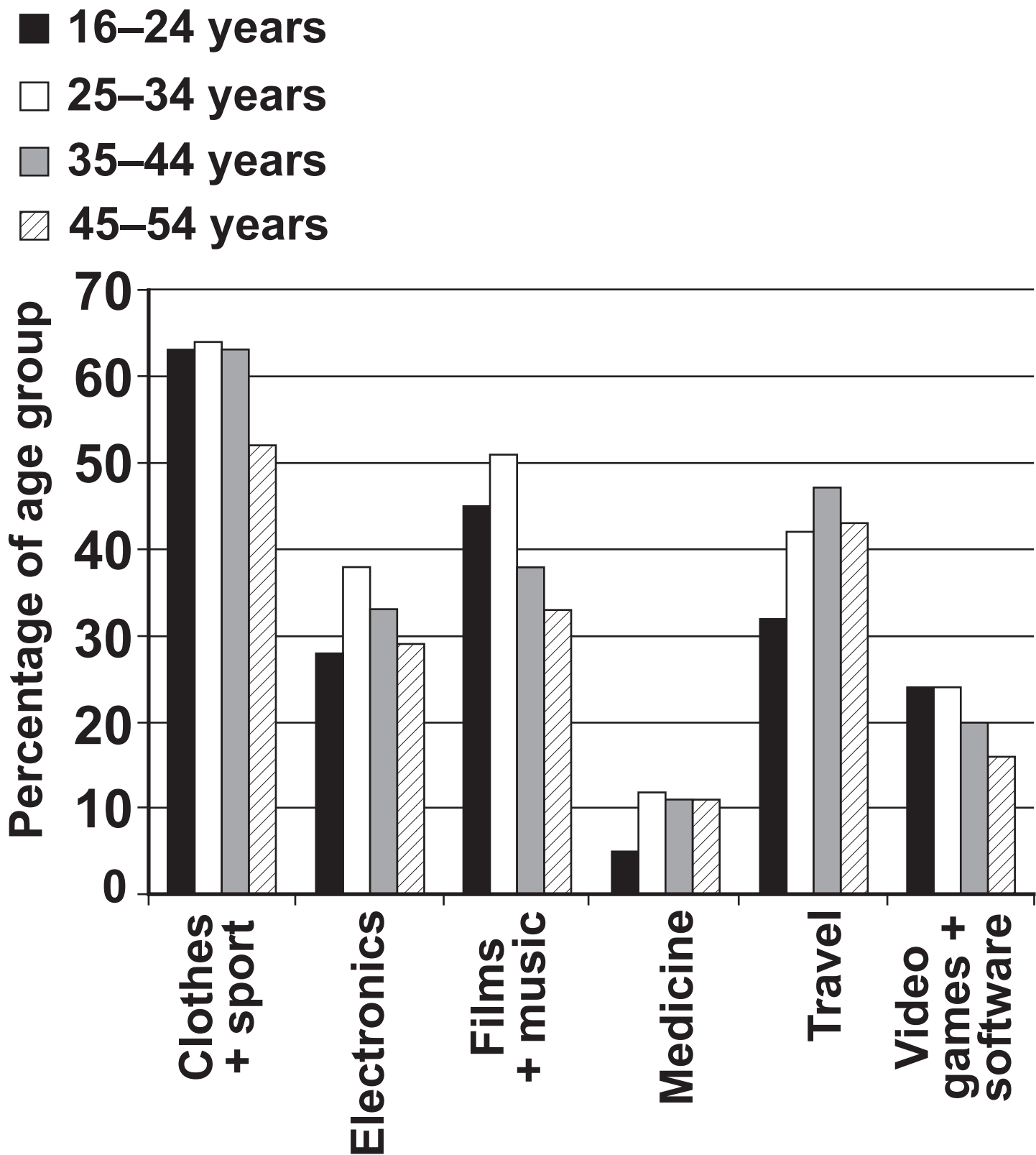
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**[2]**

**FIGURE 1**

**Percentage of an age group and internet purchases**



**(ii) State THREE differences between internet purchases for Clothes and sport and Films and music as shown by the graph.**

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**[3]**

**(b) Outline THREE possible health risks of using medicines purchased over the internet.**

**[9]**

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[illegible]

## **SECTION B**

**Answer ONE question from this section.  
Your answer should be in continuous  
prose.**

**Answer in the space provided on pages 17  
to 23.**

- 3 The following information concerns the  
process of scientific investigation:**

**The scientist says “That didn’t work as  
expected, but it’s an important finding  
and I need to report it honestly.”**

**ask a question**

**read background information**

**form a hypothesis**

**conduct experiments**

**analyse and communicate results.**

**Assess the reliability of this model for scientific investigation.**

**Use ONE example to support your answer.**  
**[30]**

**4 Why are some forecasts successful when others are unreliable? [30]**

**5 In the future, there may be more funding available for research into the following different areas:**

**genetically modified food**

**mental health problems**

**organ transplants.**

**Choose ONE of these areas. Outline and discuss why your chosen area should have an increase in funding compared to the other areas.**

**[30]**



[illegible]

[illegible]







**END OF QUESTION PAPER**

## ADDITIONAL ANSWER SPACE

**If additional space is required, you should use the following lined page(s). The question number(s) must be clearly shown in the margin(s).**

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