Introduction

The HPAT-Ulster Sample Questions contains examples of the kind of material and questions you can expect to find in the Health Professions Admission Test (HPAT-Ulster), but the test can vary to some extent in style and difficulty.

The questions are grouped to reflect the three sections of HPAT-Ulster:

Section 1  Critical Reasoning
Section 2  Interpersonal Understanding
Section 3  Written Communication

Answers for all questions in Sections 1 and 2 are given at the back of the HPAT-Ulster Sample Questions.

Section 3 of the Sample Questions contains samples of writing tasks similar to those which will appear in the real HPAT-Ulster. This section gives you an opportunity to practise writing two finished pieces of work in a limited time. Obviously no answers can be given.

More general advice on how you can prepare for HPAT-Ulster is available on the website http://www.hpat-ulster.acer.org
Questions 1 – 3

Michael is growing hibiscus plants. He is told they will grow better if he gives them some lime and fertiliser. He considers the following set-ups (I – V).

1 Which set-up would be best to use with set-up II to see whether lime is good for growth?
   A I
   B III
   C IV
   D V

2 In order to best show the effect on growth of water alone, a plant with no water, no lime and no fertiliser should be compared with set-up(s)
   A I.
   B II and III.
   C IV.
   D V.

3 How could the effect of fertiliser best be shown?
   A compare I and II
   B compare I and III
   C compare II and III
   D compare III and IV
Our solar system is composed of nine* planets that travel around a star we call the Sun. Figure 1 indicates the relative sizes of the planets and their order from the Sun. Table 1 provides further information about the planets (based on information known around the year 2000).

- An orbit is the path a planet takes as it travels completely around the Sun.
- The length of a year for a planet is the time it takes for the planet to travel once around the Sun.
- The length of a day for a planet is the time it takes to spin around once on its axis.

### Table 1

<table>
<thead>
<tr>
<th>Planet</th>
<th>Mean distance from the Sun (× 1,000,000 km)</th>
<th>Diameter (km)</th>
<th>Number of moons</th>
<th>Average orbital speed (km/s)</th>
<th>Time to orbit the Sun (Earth years)</th>
<th>Length of day (hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mercury</td>
<td>58</td>
<td>4,880</td>
<td>0</td>
<td>48.0</td>
<td>0.24</td>
<td>1416</td>
</tr>
<tr>
<td>Venus</td>
<td>108</td>
<td>12,100</td>
<td>0</td>
<td>35.0</td>
<td>0.62</td>
<td>5832</td>
</tr>
<tr>
<td>Earth</td>
<td>150</td>
<td>12,760</td>
<td>1</td>
<td>30.0</td>
<td>1.00</td>
<td>24</td>
</tr>
<tr>
<td>Mars</td>
<td>228</td>
<td>6,800</td>
<td>2</td>
<td>24.0</td>
<td>1.88</td>
<td>24.6</td>
</tr>
<tr>
<td>Jupiter</td>
<td>778</td>
<td>143,800</td>
<td>16</td>
<td>13.0</td>
<td>11.86</td>
<td>9.84</td>
</tr>
<tr>
<td>Saturn</td>
<td>1,427</td>
<td>120,000</td>
<td>18</td>
<td>10.0</td>
<td>29.46</td>
<td>10.23</td>
</tr>
<tr>
<td>Uranus</td>
<td>2,870</td>
<td>52,300</td>
<td>15</td>
<td>6.8</td>
<td>84.01</td>
<td>17.24</td>
</tr>
<tr>
<td>Neptune</td>
<td>4,497</td>
<td>49,500</td>
<td>8</td>
<td>5.4</td>
<td>164.79</td>
<td>18.4</td>
</tr>
<tr>
<td>Pluto</td>
<td>5,900</td>
<td>3,000</td>
<td>1</td>
<td>4.7</td>
<td>247.70</td>
<td>153.4</td>
</tr>
</tbody>
</table>

* recently Pluto has been downgraded to a minor planet.
Section 1

4 Which one of the following statements is supported by the data?
   A Day length increases as distance from the sun decreases.
   B Orbital speed increases as year length decreases.
   C Diameter increases as orbital speed increases.
   D Year length decreases as diameter increases.

5 Which one of the following statements is best supported by the data?
   A Planets further from the sun travel faster and therefore have shorter days.
   B Planets closer to the sun travel faster and therefore have shorter days.
   C Planets with longer days travel slower and are closer to the sun.
   D Day length is unrelated to average orbital speed and distance from the sun.

6 Which one of the following is the best estimate of the number of Neptune days that equal ten Earth days?
   A 4
   B 8
   C 12
   D 16

7 Which one of the following is the best estimate of the number of Saturn days in an Earth year?
   A 1600
   B 800
   C 400
   D 100
UNIT 3

Questions 8 – 11

Mandy, Jane and Emma are old friends who came from the same high school to live in the same university college. They spent most of their time working and socialising during the first term. During the second and the third terms they went their separate ways with new friends and new activities. Towards the end of the first term of the second year, Emma speaks to Jane of her concerns about what seems to be happening with Mandy.

Emma: She’s not working. She’s mixing with the wrong people. And you know she’s drinking a lot, and she’s taking drugs. We’ve known her all our lives. I think we should try and do something. Try to help her.

Jane: I don’t like the look of it. Those people give me the creeps. But it’s her life. She’s not our sister. People make their own choices.

Emma: You know the situation is serious. I’m not going to sit back and watch her destroy herself.

Jane: Don’t exaggerate. I don’t like it, either. She’s lost the plot. But we can’t interfere.

Emma: You know the situation is serious. I’m not going to sit back and watch her destroy herself.

Jane: Well, your self-imposed guilt is your problem.

Emma: Yes, but that’s better than letting this happen. I couldn’t forgive myself for just standing back.

Jane: No, you can’t. Okay. Let’s do something positive. We’ve got to talk to her. We’ve got to tell her what we feel and what we fear.

Emma: Yes. Yes.

Jane: But we have to be clear about what we’re going to say. We are definitely not going to moralise or interfere. Right?

Emma: Okay.

Jane: We tell her we don’t want to interfere. We tell her we aren’t happy that we seem to be losing touch with her. But we tell her we’re even more unhappy about what seems to be happening to her. The partying, those people, and her studies. We tell her we don’t want to lose touch with her and that we don’t want to see her going that way.

Emma: We want her to look at what she’s doing and where she’s going.

Jane: Well, … yes. We want her to think about the consequences of what she’s doing. But nothing changes her relationship with us or the way we feel about her. And nothing will. Yes. That’s what we want her to know.

Emma: Yes. You’ve got it. That’s right.
8 Jane and Emma disagree about
   A what is motivating Mandy.
   B what will happen to Mandy.
   C the nature of Mandy’s actions.
   D how Mandy’s family will view her situation.

9 Jane’s statement
   ‘Well, your self-imposed guilt is your problem’ (comment 8)
   A shows Jane’s own guilt about Mandy.
   B refuses to recognise Emma’s problem.
   C seems to accept Emma’s concern for Mandy.
   D seems to dismiss Emma’s concern for Mandy.

10 In comment 10, Jane
   A distorts Emma’s motives.
   B questions Emma’s motives.
   C gives a positive interpretation of Emma’s motives.
   D gives a negative interpretation of Emma’s motives.

11 During the dialogue, Emma is best described as
   A selfish and unthinking.
   B moralistic and self-righteous.
   C warm-hearted but inclined to jump to conclusions.
   D judgmental but without foundation for her judgments.
Questions 12 – 14

The following is a phone conversation between a female doctor and a male patient.

Patient Doctor, I’m still not feeling any better and I won’t be able to go to work today either. Is it OK if I come by at lunchtime and pick up another sick certificate?
Doctor I’m surprised you don’t feel any better. I would have expected the symptoms to have almost gone by now.
Patient They have a bit, but I think another day should help me get fully right.
Doctor I think it would be best if you make an appointment to come in and see me.
Patient But why? It’s exactly the same problem as the other day, I just need another certificate.
Doctor I appreciate that, but I’m not prepared to write you a certificate without a consultation.
Patient But I’ve heard about other doctors who are prepared to do it.
Doctor I can’t speak for them, I can only tell you how I practise.

12 Which of the following best describes the doctor’s manner in this situation?
A compliant
B evasive
C patronising
D resolved

13 As a result of the doctor’s responses, the patient would be justified in feeling
A mistreated and neglected by the doctor.
B frustrated but clear about the doctor’s expectations.
C optimistic about getting the certificate without a consultation.
D uncertain and confused about the doctor’s position on the matter.

14 In her final comment, the doctor’s main intention is to
A encourage the patient to go and see a different doctor.
B appease the patient by accepting the truth of his statement.
C appear more honourable by undermining the practice of other doctors.
D avoid criticising other doctors while maintaining her position on the issue.
# ANSWERS

## Section 1

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>D</td>
</tr>
<tr>
<td>2</td>
<td>D</td>
</tr>
<tr>
<td>3</td>
<td>A</td>
</tr>
<tr>
<td>4</td>
<td>B</td>
</tr>
<tr>
<td>5</td>
<td>D</td>
</tr>
<tr>
<td>6</td>
<td>C</td>
</tr>
<tr>
<td>7</td>
<td>B</td>
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## Section 2

<table>
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<th>Answer</th>
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<td>B</td>
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<td>9</td>
<td>D</td>
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<td>C</td>
</tr>
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<td>11</td>
<td>C</td>
</tr>
<tr>
<td>12</td>
<td>D</td>
</tr>
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<td>13</td>
<td>B</td>
</tr>
<tr>
<td>14</td>
<td>D</td>
</tr>
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</table>
Section 3

TASK 1

Compare material on these pages and develop a fluently written piece of prose that integrates the ideas and information.

You should outline and summarise the material. You should not offer an opinion on the issue.

Your response will be judged on:

• the quality of thought and understanding applied;
• the use of language to express ideas and information.

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**REASONS FOR NOT RECYCLING**

“What is your main barrier for not recycling?”

*Base: Those who do not recycle*

<table>
<thead>
<tr>
<th>Reason</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not available in our area</td>
<td>15%</td>
</tr>
<tr>
<td>It takes too much effort</td>
<td>12%</td>
</tr>
<tr>
<td>It costs more to recycle where I live</td>
<td>12%</td>
</tr>
<tr>
<td>I don’t believe it makes an impact or difference</td>
<td>11%</td>
</tr>
<tr>
<td>I am too busy</td>
<td>6%</td>
</tr>
<tr>
<td>It is too difficult</td>
<td>5%</td>
</tr>
<tr>
<td>No recycling centre/drop off locations near</td>
<td>5%</td>
</tr>
<tr>
<td>No pickup in area</td>
<td>4%</td>
</tr>
<tr>
<td>Live in an apartment/facility that does not provide separate bins</td>
<td>4%</td>
</tr>
<tr>
<td>Don’t know how/lack of information</td>
<td>2%</td>
</tr>
<tr>
<td>Not mandatory</td>
<td>2%</td>
</tr>
<tr>
<td>Other</td>
<td>6%</td>
</tr>
<tr>
<td>Not sure</td>
<td>17%</td>
</tr>
</tbody>
</table>

Note: Percentages may not add up to exactly 100% due to rounding.

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**Miscellaneous facts on recycling in the UK**

- Up to 60% of the rubbish that ends up in the dustbin could be recycled
- The unreleased energy contained in the average dustbin each year could power a television for 5,000 hours
- On average, 16% of the money spent on a product pays for the packaging
- Up to 80% of a vehicle can be recycled
- 9 out of 10 people would recycle more if it were made ‘easier’
- Meeting the 2010 recycling target would create 45,000 jobs
- Every year UK households produce 34 million tonnes of rubbish, most of which ends up in landfill sites

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**Most frequently endorsed reasons for recycling**

<table>
<thead>
<tr>
<th>Reason</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘to conserve the earth’s resources’</td>
<td>89%</td>
</tr>
<tr>
<td>‘because it’s easy to do’</td>
<td>73%</td>
</tr>
<tr>
<td>‘because it’s a habit’</td>
<td>72%</td>
</tr>
</tbody>
</table>
### Survey results: Recycling behaviour according to age group

<table>
<thead>
<tr>
<th>Question: What do you recycle?</th>
<th>Age Group</th>
<th>Age 18–30</th>
<th>Age 31–42</th>
<th>Age 43–61</th>
<th>Age 62+</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>Aluminium or metal cans</td>
<td></td>
<td>60</td>
<td>70</td>
<td>68</td>
<td>70</td>
</tr>
<tr>
<td>Paper</td>
<td></td>
<td>50</td>
<td>58</td>
<td>60</td>
<td>68</td>
</tr>
<tr>
<td>Plastic</td>
<td></td>
<td>51</td>
<td>57</td>
<td>61</td>
<td>60</td>
</tr>
<tr>
<td>Glass (bottles)</td>
<td></td>
<td>50</td>
<td>55</td>
<td>54</td>
<td>57</td>
</tr>
<tr>
<td>Cardboard</td>
<td></td>
<td>5</td>
<td>3</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Batteries, motor oil and other hazardous materials</td>
<td></td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Organic materials</td>
<td></td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Metal</td>
<td></td>
<td>*</td>
<td>1</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Electronics</td>
<td></td>
<td>1</td>
<td>1</td>
<td>*</td>
<td>1</td>
</tr>
<tr>
<td>Something else</td>
<td></td>
<td>2</td>
<td>1</td>
<td>*</td>
<td>1</td>
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<tr>
<td>Nothing</td>
<td></td>
<td>30</td>
<td>20</td>
<td>23</td>
<td>19</td>
</tr>
</tbody>
</table>

Note: Percentages may not add up to exactly 100% due to rounding.
Note: * = less than 0.5%

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**The Waste Management Hierarchy**

1. **Waste reduction**
   - Buy products that will last and are not disposable such as disposable razors, etc.

2. **Re-use**
   - Use carrier bags/storage jars more than once

3. **Recycling and composting**
   - Use facilities provided at home or in your local area

4. **Recovery**
   - Producing power and heat from waste treatment methods

5. **Landfill**
   - Disposal of waste without any value recovered

Best option ➤ Worst option
It seems to me that people have vast potential. Most people can do extraordinary things if they have the confidence or take the risks. Yet most people don’t. They sit in front of the telly and treat life as if it goes on forever.

*Philip Adams*

Optimism is the faith that leads to achievement. Nothing can be done without hope and confidence.

*Helen Kellar*

Attempt easy tasks as if they were difficult, and difficult as if they were easy; in the one case that confidence may not fall asleep, in the other that it may not be dismayed.

*Baltasar Gracian*