OCR
RECOGNISING ACHIEVEMENT

Wednesday 11 January 2012 – Afternoon

LEVEL 2 AWARD THINKING AND REASONING SKILLS

B901   Unit 1 Thinking and Reasoning Skills

Candidates answer on the Question Paper.	
OCR supplied materials: None	**Duration:** 1 hour
Other materials required: None	

Candidate forename		Candidate surname	

Centre number					Candidate number				

INSTRUCTIONS TO CANDIDATES

* Write your name, centre number and candidate number in the boxes above. Please write clearly and in capital letters.
* Use black ink. HB pencil may be used for graphs and diagrams only.
* Answer **all** the questions.
* 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 pages at the end of this booklet. The question number(s) must be clearly shown.
* Do **not** write in the bar codes.

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 will be assessed on the quality of your written communication in questions 12 and 13. The quality of your grammar, spelling and punctuation will affect the mark for these questions.
* This document consists of **16** pages. Any blank pages are indicated.

OCR is an exempt Charity

Turn over

Section A

You are advised to spend no more than 30 minutes on this Section. It is worth 30 marks.

Answer all the questions in this Section.

1 A food nutritionist argued as follows:

> Foods containing high fibre are healthy. Porridge contains high fibre so porridge is a healthy food. Therefore school children should be encouraged to eat porridge for breakfast.

(a) Mark up the argument as follows:

    (i) circle **two** indicator words; **[2]**

    (ii) put brackets around the intermediate conclusion; **[1]**

    (iii) underline the main conclusion. **[1]**

(b) For the above argument draw the correct argument map in the box provided.
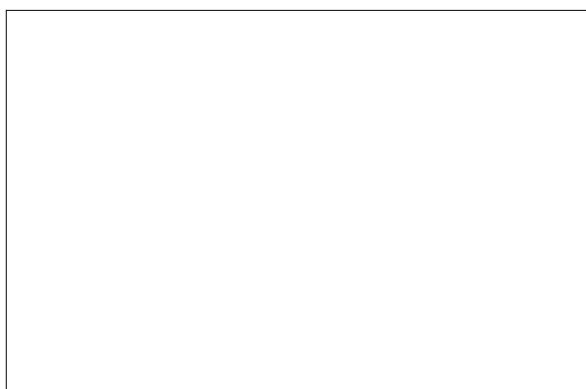
[3]

2 Three friends, Adeel, Ben and Cassie, travel separately into the city centre where they hope to meet up. Adeel catches a train into the city at 5.30 and the journey takes him 50 minutes. Ben catches a bus into the city at 4.50 and the journey takes him 65 minutes. Cassie cycles into the city leaving home at 5.40 and her journey takes 30 minutes.

(a) Which is the earliest possible time they can all meet together?

- 6.10
- 6.20
- 6.30
- 6.40

Circle the correct answer. **[1]**

(b) How long does the friend who arrives first have to wait before they can all meet up?

- 10 minutes

- 15 minutes

- 20 minutes

- 25 minutes

Circle the correct answer. **[1]**

(c) Identify **three** different reasons which would explain why Cassie's journey does not take as long as Ben's journey.

(i) Reason 1 .... **[1]**

(ii) Reason 2 .... **[1]**

(iii) Reason 3 .... **[1]**

3 A teacher collects the following information about all the students in her small class:

Name	Gender	Favourite Animal	Hobby	Part time job
Amy	Female	Horse	Riding	Waitress
Ben	Male	Dog	Computer games	Shop assistant
Colin	Male	Snake	Computer games	Shop assistant
Daniel	Male	Dog	Play drums	Delivers newspapers
Ellie	Female	Cat	Reading	Waitress
Fariba	Female	Horse	Riding	Waitress
George	Male	Dog	Listening to music	No job
Harriet	Female	Horse	Listening to music	No job

Use the information in the table provided to identify which of the following claims are true and which are false.

In each case give a reason for your answer.

(a) Claim: Male students in this class do not like horses.

   (i) This claim is true   This claim is false.   Circle the right answer   **[1]**

   (ii) Reason ....

   .... **[1]**

(b) Claim: Students in this class whose hobby involves music do not have jobs.

   (i) This claim is true   This claim is false.   Circle the right answer   **[1]**

   (ii) Reason ....

   .... **[1]**

(c) Claim: Most male students have computer games as their hobby.

   (i) This claim is true   This claim is false.   Circle the right answer   **[1]**

   (ii) Reason ....

   .... **[1]**

(d) Two new students join the class. The patterns true of the existing students remain true for these two new students.

   Use this information to complete the table below:

Name	Gender	Favourite Animal	Hobby	Part time job
New Student X		Horse		No job
New Student Y		Dog		Shop assistant

[4]

4 A student has a novelty watch. The minute hand behaves normally but the hour hand goes round backwards. It reads the same time as a conventional watch at 12 noon and 12 midnight.

(a) What time is it when the hands are positioned as shown in the picture below?
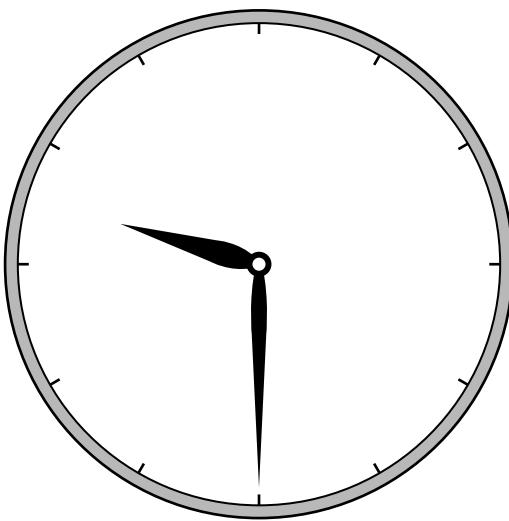
- 2.00

- 2.30

- 4.00

- 4.30

- 5.50

Circle the right answer. **[1]**

(b) Draw the hands on the watch face provided below to show what the watch will look like when the time is 3.15.

[1]

Turn over
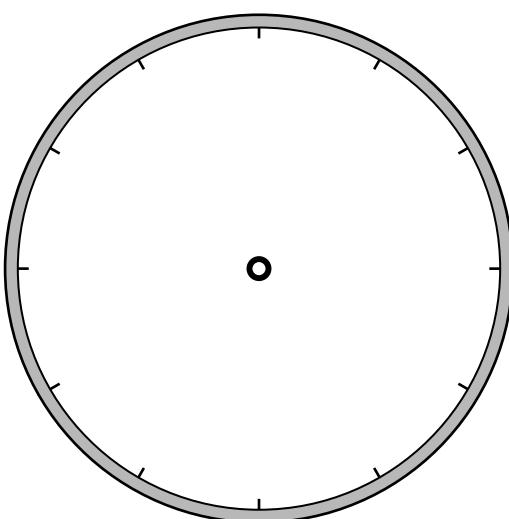
5 Alice and her boyfriend Bill go out together for a meal. They are accompanied by Cathy who is Bill's sister. They each ordered a different food item and a different drink item.

Use the matrix and the information provided to work out what everyone ordered and then complete the sentences below.

- The person who ordered the salad was not very hungry.

- Both Alice and the girl who ordered the mineral water were very hungry.

- The person who ate the pizza drank the diet coke.

	Pasta	Pizza	Salad		Diet Coke	Fresh orange	Mineral water
Alice							
Bill							
Cathy							

(a) The food and drink chosen by Alice were

.... and .... **[1]**

(b) The food and drink chosen by Bill were

.... and .... **[1]**

(c) The food and drink chosen by Cathy were

.... and .... **[1]**

6 Consider the following evidence about eating chocolate:

- The world champion 1500 m runner eats seven chocolate bars a week

- In a school science class it was discovered that the children who liked chocolate were heavier than those who did not like chocolate

- People with heart disease are known to have eaten more chocolate in their lifetime than those without heart disease

- Many people do not like chocolate

Assuming all this evidence is true:

(a) which piece of evidence could be used to challenge the claim that eating chocolate is unhealthy?

....

.... **[1]**

(b) which piece of evidence best supports the claim that eating chocolate is unhealthy?

....

.... **[1]**

(c) which piece of evidence is not relevant to the claim that eating chocolate is unhealthy?

....

.... **[1]**

Turn over

Section B

You are advised to spend no more that 30 minutes on this Section. It is worth 30 marks.

Answer all the questions in this section.

Read the following text carefully before attempting to answer the questions.

Four students took part in a school debate. The debate asked the question: Do human beings have souls which can survive the death of the body?

- Anita introduces the case for life after death
- Barbara supports Anita by arguing for the existence of the soul
- Callum argues against the existence of the soul
- Dhanish responds to one of Callum's arguments

Anita introduces the case for life after death

Lots of people have seen ghosts and lots of people who have been close to death have had out of body experiences. So there is evidence for life after death. Anyway, people have always believed in some form of life after death. So it must be true.

Barbara supports Anita by arguing for the existence of the soul

Well I'm not religious but I certainly believe in the existence of the soul. I believe we each have a soul and when the body dies the soul continues to exist. The human body is just like a suit of clothes which the soul wears and can therefore leave behind. If you cut me open you'll see my heart and lungs but you'll not see what I'm thinking or feeling. No one can see thoughts or emotions but they do exist and they are my soul. So we do have souls.

Callum argues against the existence of the soul

I've been reading a book by the famous scientist Richard Dawkins and it seems to me that science has proved that there is no such thing as the soul. People who believe in the soul are just idiots, so the soul doesn't exist**.** There are two arguments for this:

Firstly, the fact is you need a body with a working heart and lungs to be alive and when you die your heart and lungs stop working so that must mean you cease to exist.

Secondly, we are intelligent but so are computers. They can solve problems and do maths just like us. Computers don't have souls but are just machines and so are we. When the computer is broken up that's the end of it.

Dhanish responds to Callum

I'm not sure about that. Computers do things which make them look intelligent but I don't think they really have thoughts and feelings, so they don't have souls. After all, my pocket calculator can do simple maths but it doesn't really think about it in the way we do. We're different from computers.

In fact we're more like cats and dogs and they must have souls because they have thoughts and feelings too.

---

7 Anita argues:

> Anyway, people have always believed in some form of life after death. So it must be true.

Explain why Anita's reasoning is weak.

....

....

....

....

.... **[2]**

8 Anita offers the following evidence for belief in life after death:

> Lots of people have seen ghosts and lots of people who have been close to death have had out of body experiences.

Identify and explain **two** ways in which the people who make these claims may not be seen as credible.

(a) 1 ....

....

.... **[2]**

(b) 2 ....

....

.... **[2]**

9 To support his argument against the existence of the soul Callum says:

> People who believe in the soul are just idiots, so the soul does not exist.

Name the flaw in this argument .... **[1]**

10 To support the belief in life after death Barbara uses the following analogy:

> The human body is just like a suit of clothes which the soul wears.

Identify and explain **one** important difference between the human body and a suit of clothes which makes the analogy weak.

....

....

....

.... **[2]**

11 Dhanish makes a connection between having thoughts, feelings and possessing a soul.

(a) Does he think the connection is:

- necessary only?

- sufficient only?

- both necessary and sufficient?

- neither necessary nor sufficient?

Circle the correct answer. **[1]**

(b) Explain your answer

....

....

....

.... **[2]**

12 Write a persuasive argument to support Dhanish's claim that "we are different from computers".

Your argument should include:

- a precise conclusion

- which is clearly supported by reasons

- with relevant evidence and/or examples.

You may use your own ideas and those from the school debate, but you will not be credited for copying from the text.

....

....

....

....

....

....

....

....

....

....

....

....

....

....

....

....

....

....

....

....

....

....11..

.... **[9]**

Turn over

13 Develop a persuasive argument to challenge the claim that "lots of people have seen ghosts".

Your argument should include:

- a precise conclusion

- which is clearly supported by reasons

- with relevant evidence and/or examples.

....

....

....

....

....

....

....

....

....

....

....

....

....

....

....

....

....

....

....

....

....

.... **[9]**

Additional Pages:
If you use these lined pages to complete an answer to any question, the question number(s) **must** be clearly shown.

....

....

....

....

....

....

....

....

....

....

....

....

....

....

....

....

....

....

....

....

....

....

……

……

……

……

……

……

……

……

……

……

……

……

……

……

……

……

……

……

……