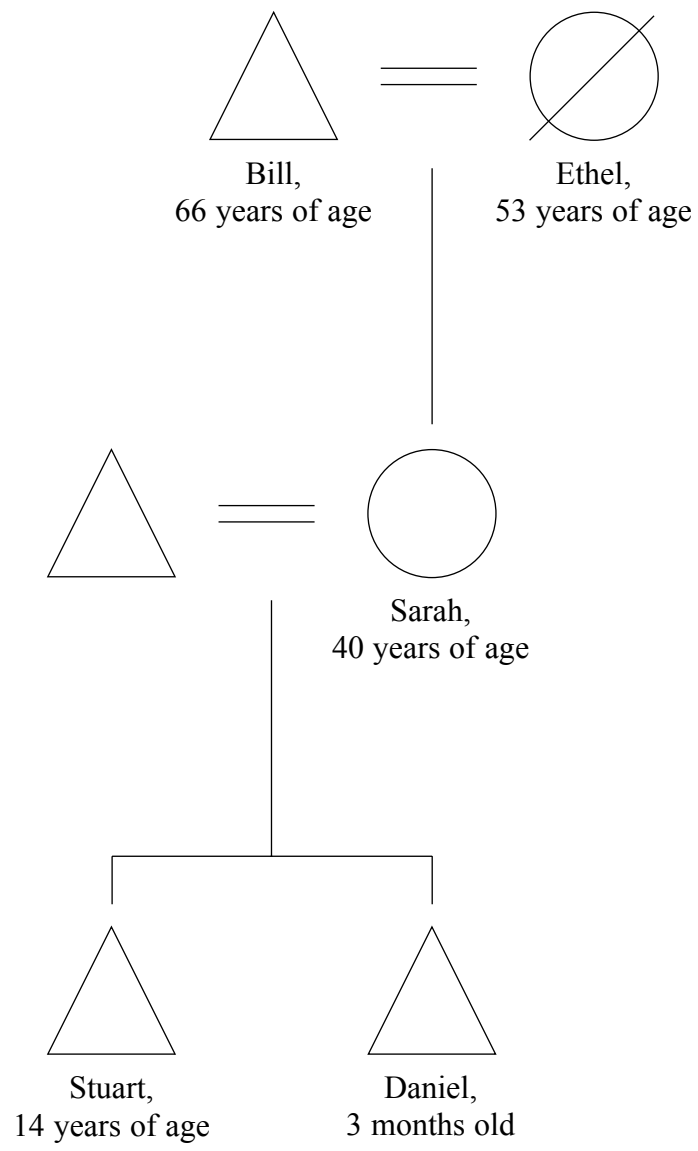


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This question paper is based around the Hughes family.



key

- = male
- = female
- = female deceased



Answer ALL questions in the spaces provided.

1.

Sarah is 40 years of age and has two children. Stuart is 14 years of age and Daniel is three months old. Daniel has a genetic disorder called Down's syndrome.

(a) Describe how a genetic disorder, such as Down's syndrome, could arise.

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(3)

(b) (i) Daniel will have his growth and development carefully monitored.

Explain the difference between growth and development.

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(4)



(ii) All infants go through **patterns of development**.

Identify and describe **one** physical pattern of development occurring in **all** infants.

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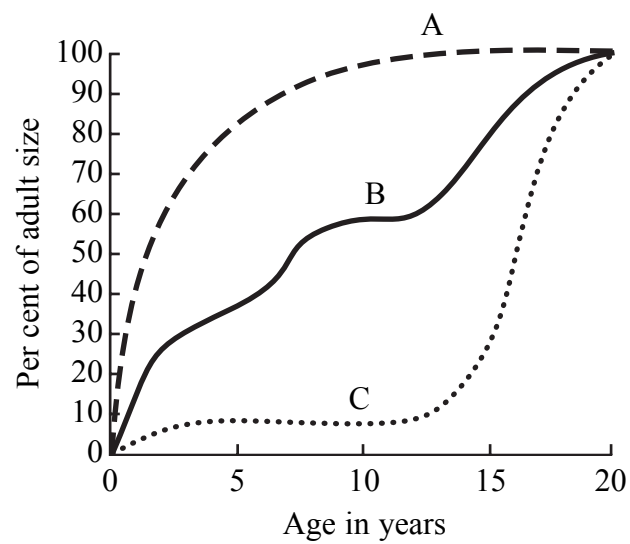
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(3)

(iii)

Differential growth chart



The differential growth chart shows how different areas of the body grow at different rates compared to age.

Which growth curve (A, B or C) represents the growth of:

the sexual organs

(1)

the head and brain

(1)



2.

Sarah's mother died from heart disease in her early fifties. Investigations showed that there was a family history on her mother's side of high blood cholesterol. Sarah already has high blood cholesterol. Sarah's father, Bill (66 years old), has been a lifetime cigarette smoker and this has resulted in heart disease and respiratory problems. He has lived in a small house about 10 miles away since Sarah was born. This is a deprived area close to an industrial estate. Unemployment is high with crime and vandalism common.

(a) (i) State **two** ways in which Sarah could reduce her blood cholesterol.

- 1
 -
 -
 - 2
 -
 -
- (2)**

(ii) State **two** ways in which Sarah could protect herself from heart disease caused by cigarette smoking.

- 1
 -
 -
 - 2
 -
 -
- (2)**



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blank

(c) Describe **two** long-term effects of smoking other than heart disease.

1

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.....

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2

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(4)

(d) Explain **one** way in which health promotion agencies have campaigned to reduce tobacco-related disease.

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(4)



3.

Stuart has an active lifestyle and has been selected for the youth team of a famous local football club. He is performing well at school and wants to be a professional footballer. Stuart has a small group of close friends and is generally popular at school.

(a) (i) Identify Stuart's current life stage.

..... (1)

(ii) State **one** emotional feature associated with this life stage.

.....
..... (1)

(iii) Identify **two** physical changes associated with Stuart's current life stage.

1
.....
2
..... (2)



