

AS Level Biology B

H022/02 Biology in depth

Question Set 16

- 1 (a)* A 25 year old pregnant woman visits her GP enquiring about antenatal care. She informs her GP that she has already stopped drinking alcohol.

Explain any further dietary changes **and** routine antenatal tests that the GP would recommend.

[6]

- (b) A high consumption of alcohol during pregnancy may lead to birth defects in the developing fetus, but it can also result in the formation of ulcers in the small intestine of the mother.

The ulcers are caused by the death of the cells that line the small intestine.

Suggest how alcohol can lead to cell death.

[2]

- (c) Fig. 1 shows the effects of alcohol on a developing fetus.

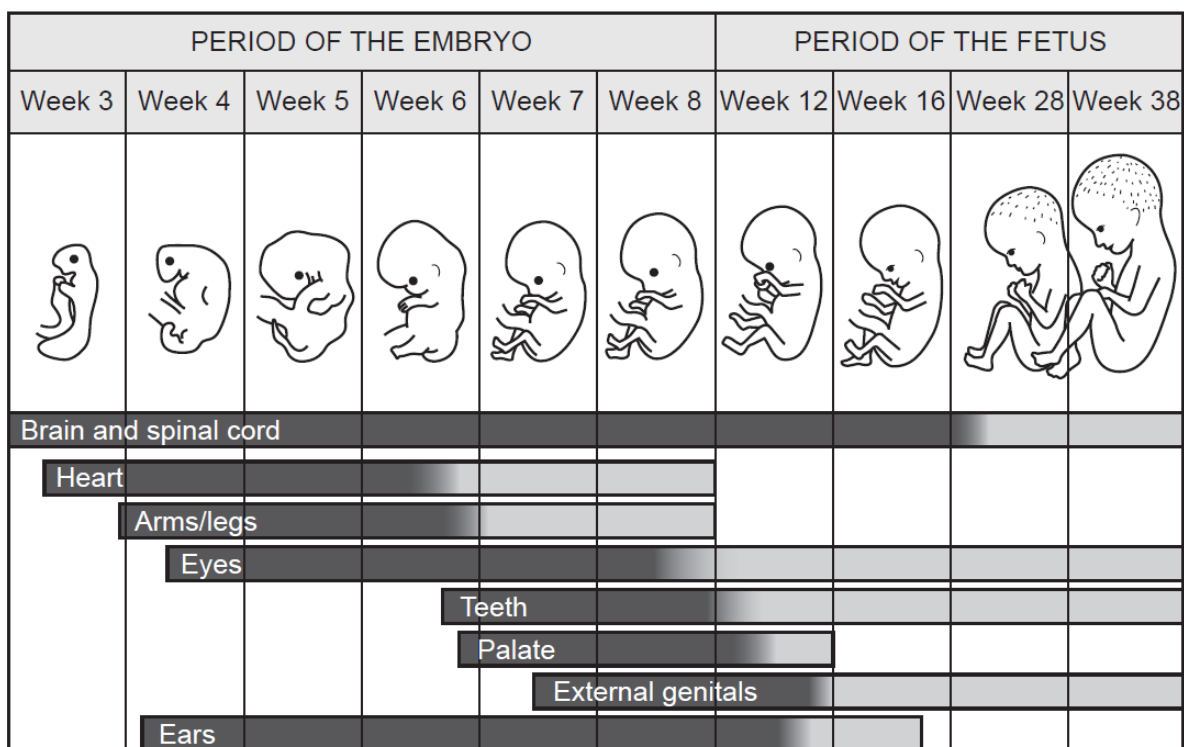


Fig. 1

Using Fig. 1, state which week of development results in the greatest number of:

- (i) major defects in body structure

[1]

- (ii) major functional defects.

[1]

- (d) Alcohol consumption during pregnancy can result in babies being born with syndactyly (webbed fingers and toes). During normal fetal development, syndactyly is prevented by a process that removes excess cells from the hands and feet.

Describe this process

[2]

Total Marks for Question Set 16: 12

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