

# KOLEKSI SOALAN KBAT BIOLOGI 2015

## Soalan 10/16

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Answer scheme translated by [SPM Soalan](#)

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## Soalan 10

- Polidaktil adalah kecacatan kongenital yang agak sering wujud dalam keluarga
- Kes polidaktil berlaku 1 dalam setiap 500 kelahiran hidup.
- Ia boleh berlaku di mana-mana tiga tempat di tangan:
  - pada sebelah jari kelingking - paling kerap berlaku ( polidaktil ulnar)
  - di sebelah ibu jari, juga dikenali sebagai duplikasi ibu jari– kurang kerap berlaku (polidaktiljejari)
  - di tengah-tengah tangan – paling jarang berlaku (polidaktil tengah)
- Jari tambahan yang terbentuk biasanya lebih kecil dari jari-jari lain dan perkembangannya tidak normal
- Jari tambahan tersebut boleh terdiri daripada :
  - Kulit dan tisu lembut (paling senang dibuang)
  - kulit, tisu lembut dan tulang ( tiada sendi –sukar untuk dibuang)
  - kulit, tisu lembut dan tulang dengan sendi ( hamper membentuk jari yang sempurna – paling sukar untuk dibuang)
  
- *Polydactyly is a fairly common congenital defect that often runs in families.*
- *It is reported that polydactyly occurs 1 in every 500 live births.*
- *it may occur in any of three places of the hand:*
  - *on the small finger side—most common (ulnar polydactyly)*
  - *on the thumb side, also called thumb duplication - less common (radial polydactyly)*
  - *in the middle of the hand—least common (central polydactyly)*
  
- *The extra fingers are usually smaller than the other fingers and are abnormally developed.*
  
- *It can be made up of:*
  - *skin and soft tissue (most easily removed)*
  - *skin, soft tissue and bone (no joint—more challenging to remove/remodel)*
  - *skin, soft tissue and bone with joint (closer to a fully-formed finger—most challenging to remove/remodel)*

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Polidaktil ulnar  
*Ulnar polydactyly*



Polidaktil jejari  
*Radial polydactyly*

Anak anda mempunyai polidaktil. Dari maklumat di atas, pada pendapat anda adakah membuang jari tambahan tersebut satu tindakan yang baik atau buruk? Berikan alasan anda.

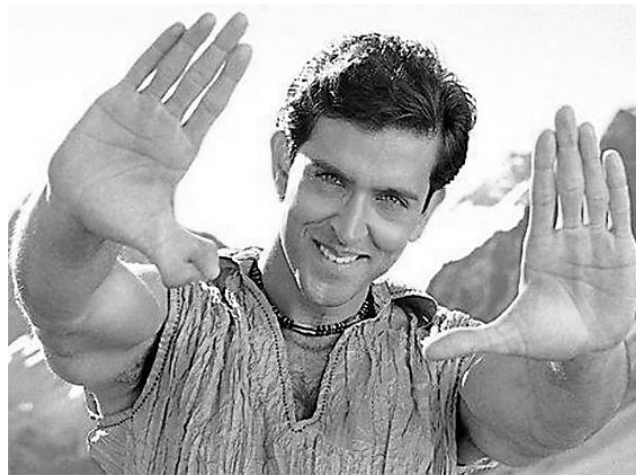
*Your child has polydactyly. From the information above, do you think removing the extra finger is a good or bad action? Give your reason.*

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Menilai( 3markah)



Hrithik Roshan adalah pelakon Bollywood India dan penari yang terkenal kerana serba boleh dan mempunyai etika kerja yang bagus, tambahan lagi boleh berlakon dalam pelbagai jenis filem yang dramatik. Dia dilahirkan dalam keadaan iaitu dua ibu jari di tangankannya. Biasanya tangan kanannya selalu disembunyikan dalam setiap filem lakonannya tetapi tidak dalam filem Koi....Mil Gaya dan ia telah digunakan sebagai plot sampingan sebagai Jaadoo makhluk asing yang mempunyai dua ibu jari pada satu tangan.

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*Hrithik Roshan is an Indian Bollywood film actor and dancer known for his versatility and work ethic in addition to great dramatic range. He was born with a supernumerary thumb that is he has two thumbs on his right hand. Although it is usually hidden in his films, it is shown in Koi....Mil Gaya and was even used as a minor plot point, as Jaadoo the alien was also designed to have two thumbs.*

(b) Pada pendapat anda,kenapakah Hrithik Roshan mempunyai trait polidaktil dominan?

*In your opinion, why do you think HrithikRoshan has the dominant trait for polydactyly?*

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Mencipta(3 markah)

## Answer scheme

\*Note that this question does not have a compulsory answer as you may answer in any way provided that your answer must be logic.

Suggested answer:

10. (a) Good action, because:

- The extra finger is useless
- He will not be discriminated
- More hygiene
- It's troublesome when wearing gloves

Bad action, because:

- May get infection
- The child is gifted
- The child is born this way
- Operation costs big amount of money

(b) – It's due to gene mutation during the pregnancy

- He inherited the polydactyl genes from his family
- Polydactyl trait is the recessive gene at which it will show its trait when both recessive genes presence
- It will cause the normal cell to divide and form a mutated limb