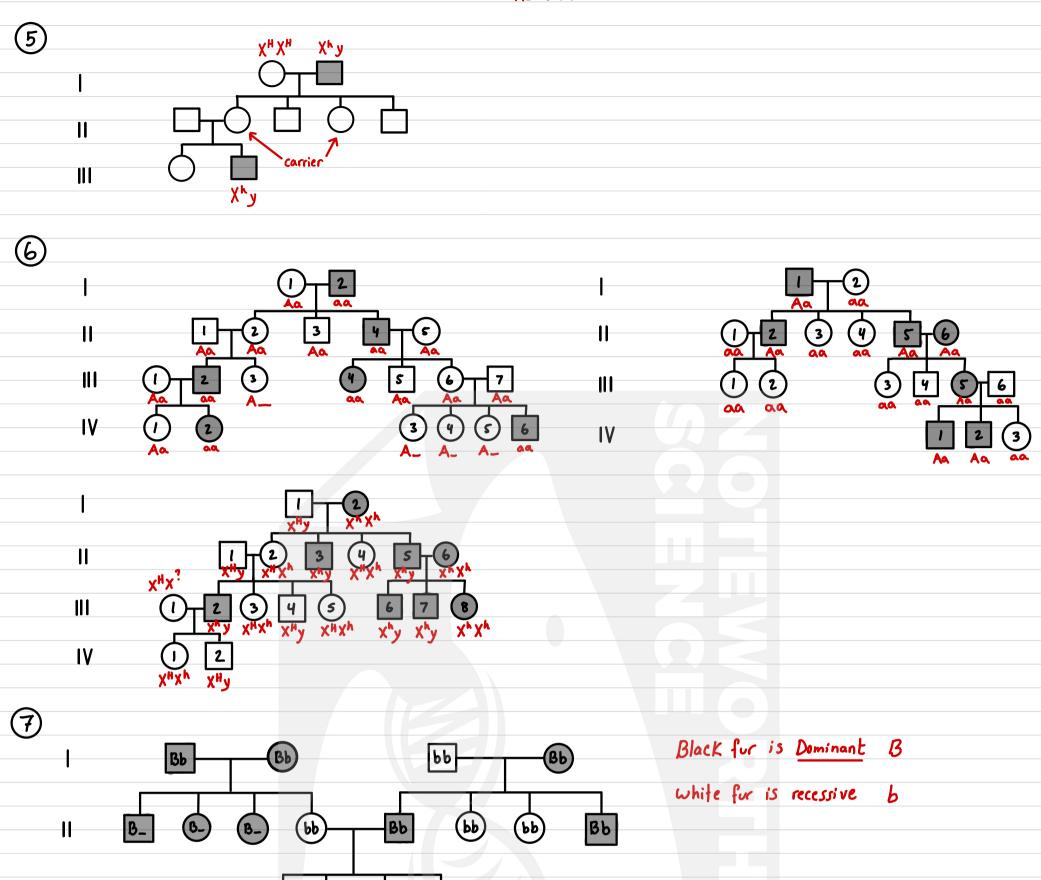
			• •
		, ,	
(I) a) Bul	ll phenotype: horned	<u> </u>	
	genotype: hh	H HA HA	phenotypic ratio horned: hornless = 0:1
Cou	u ohenotype : hornless	H Hh Hh	genotypic ratio HH: Hh: hh = 0:1:0
	genotype: HH	<b>'</b>	
b) plant l	phenotype: red	<u> Rr</u>	
, , , , , , , , , , , , , , , , , , ,	genotype: Rr	r Rr rr	phenotypic ratio red: yellow = 1:1
plant 2	genotype : Rr phenotype : yellow	R r r Rr rr r Rr rr	genotypic ratio RR: Rr: rr = 0:1:1
	genotype: rr	<u>'</u>	
C) male	phenotype: short	C CC C	
0 1-	genotype: Ss	S S S S S S S S S S S S S S S S S S S	phenotypic ratio short: long = 3:1
female	genotype: Ss phenotype: short	S S SS	genotypic ratio SS: Ss: ss = 1:2:1
	genotype: Ss		
d) rooster	phenotype: white	1 Cm Cm	
7 10-00-	genotype : Cw Cw	C	phenotypic ratio white: white/black = 1:1
hen	phenotype: white/black	CB CCB CCB	genotypic ratio CWCW: CBCB: CBCW = 1:0:1
	genotype: CWCB		
	Janetype		
e) Man	phenotype: type O	10 10	
	genotype: ii	14 1410 1A10	phenotypic ratio A: B: AB: 0 = 1:1:0:0
Woman	phenotype: type AB	10 10 10 1B10	genotypic ratio 1 <sup>A1°</sup> : 1 <sup>B1°</sup> = 1:1
	genotype 11B		
	J5./F 5		
f) man	phenotype : colour-blind	<u> </u>	
	genotype: X"y	X <sup>N</sup> X <sup>N</sup> X <sup>n</sup> X <sup>N</sup> y	phenotypic ratio colour blind: normal = 1:1
	phenotype: normal	X <sup>n</sup> X <sup>n</sup> X <sup>n</sup> X <sup>n</sup> y	phenotypic ratio colour blind: normal = 1:1  genotypic ratio XNXn: XNXn: XNy: XNy = 1:1:1:1
	genotype: XN Xn (carrier)		
	0 - 7/		

- 2) a) Genotype Hb AHb AHb SHb S

  Phenotype only normal some normal only sickle hemoglobin hemoglobin cell hemoglobin

  Some sickle cell hemoglobin
  - b) In a majoria-stricken area Hb^Hbs is the ideal genotype because despite having sickle-cell, they are mainly asymptomatic and do not suffer the full effects, however the prescence of sickle-cells makes the person resistant to majoria
- 3) a) Type O blood is the universal donor. These cells lack both A and B antigens, therefore when they are given to any other type of blood their antibodies will not identify it as foreign, allowing it to be used as normal
  - b) Type AB blood is the universal recipient. These cells have both A and B antigens, therefore when any blood type is given, there is no antigen identified as foreign as AB does not produce antibodies for them

(4)	woman genotype: 1818 or 18i		18 10		no ii genotype possible
	man genotype: 1^1B	•	14B 14B		i : impossible to have a child with type O as two i alleles
	<b>.</b>	18	Isla Isla	IBIB IB	are required and the father has no i alleles to pass on
			l		



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