Model 1

Q 1:cartilaginous joint

Q2: deoxribose sugar and phosphate group (sugar phosphate)

Q3: interstitial cells

Q4; bone marrow

Q5: Structural immunity

Q6: Coconut milk

Q7: Transverse link

Q8: 8

Q9: Achilles tendons

Q10: Cretinism

Q11: Natural killer cells

Q12: increase re absorption of sodium

Q13:* To get entire genome of cell by broken up DNA at it ,then cleaved with restriction endonuclease, these DNA piece are spliced into plasmids or phages and cloned, then various selective techniques are used to isolate the desired DNA sequences.

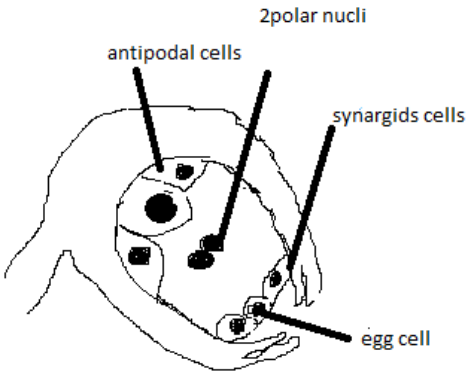
*it starts with cells in which the gene of interest is active as cells of pancreas produce insulin, they isolate this RNA and use it as a template is called reverse transcriptase once this enzyme has produced a single strand of DNA polymerase the resulting double stranded DNA can then be cloned, the second is better.

Q14: When the second male nucleus (N) fuse with 2 nuclei of embryo sac(2N) forming the endosperm nucleus that becomes triploid(3N)

Q15: Its important is the endosperm nucleus divides to form endosperm tissue supply embryo in early stage by food.

Q16: Maturation of ovule

Q17: Draw



Q18: The grow rapidly form embryo sac where the nucleus divide to give 8 nuclei, 4 migrate to each pole, one of them go to center to make 2 polar nuclei, one of the three near micropyle grow to make egg cell, the other 2 side cells called synargids cells, the other 3 at the pole called antipodal cells.

Q19: cell B and C degenerate

Q20: Antheridium

Q21: Sternum

Q22: cervix

Q23: Thymine

Q24:

Site	Function
Germinal center cortex in lymph node	-Identify any microbes -adhere to them -produce antibodies for this microbes to destroy it

Q25:

Site	Function
Outer end of scapula	To make articulation with humerus to form shoulder joint

Q26:

Site	Function
Between muscle fiber and nerve cell	Transmit nerve impulses to make contraction and relaxation of muscle

Q27:

Site	Function
Secreted at cortex of adrenal gland	-Increase re absorption of sodium -increase excretion of potassium from kidney tubules Or metabolism of mineral and balance of the body.

Q28:

Site	Function
At position of attachment of Ilium and ichium bones	Make position of attachment with femur head make hip joint

Q29:

Site	Function
Ovaries	It helps appearance of female secondary character. Regulates menstrual cycle

Q30: because the 2 bones are covered with delicate transparent cartilaginous substance and it contain a synovial floud to move easily.

Q31: because viruses with RNA genomes which use it to convert their own RNA genomes into DNA that can be joined to hosts DNA genomes.

Q32: Because he has a decreasing in metabolic rate.

Q33: if there are a direct penetration of pathogen which leading to inhibition of penetration process through them.

Q34: because each species has ite time: lion and tiger is annually, cat and dogs is twice in a year, human 28 days.

Q35: Because polymerase can't work from $3^{/}$ end toward the $5^{/}$ end of the strand which is synthesizing, it made in short pieces in the direction $5^{/}$ to $3^{/}$ and then ligase joined together these short pieces.

Q36:

$3^{/}$---------A U G A A U C U C G A A U A A U G A---------$5^{/}$

Q37: 6

Q38:

points	Graafian follicle	Corpus Latium
Time	Ovum grows and mature inside it in 10 days	After liberation of ovum, in14 days , graafian follicle transferred to it.
Or it is secretion	It secrets estrogen which stimulates the growth of the endometrial	It secretes progesterone

Q39:

Helper T cells	Cytotoxic T-cells
Activate other types of T cells and stimulate it. Stimulate B-cells to produce antibodies	Attacking carcinogenic cells, transplanted organs and body cells infected with the virus

Q40:

Adenohypophysis	Neurohypophysis
Anterior and middle lobe of pituitary gland	Posterior lobe and a part of brain called infundibulum
Or it secret: Growth hormone and pituitary trophins	It secrets: antidiuretic hormone and oxytocin

Q41: 8

Q42: 4

Q43: 56

Q44:1- archegonium 2-gametophyte 3-antheridium 4-rhizoid

Q45: antheridium the male- archegonium the female

Q46: polypedium (Adiantum)

Q47: it give new sporophyte that grow over the gametophyte till it forms root, stem and leaves.

Q48: the pea plant can't grow vertically to reach light, it may wilt and die .

Q49: that increase in calcium level in blood which release from bone, bone become fragile and liable for bending and fracture.

Q50: method to separate sperms carry (y) to produce animals with more meat, sperms with (X) for producing milk.

Q51: simple goiter happened to this person.

Q52: by surgically to open it again to let sperms reach ovum.

Q53:by protecting ear with substance act as wax because the disappear of first line of defense in ear prevent pathogens from entering the body is dangerous.

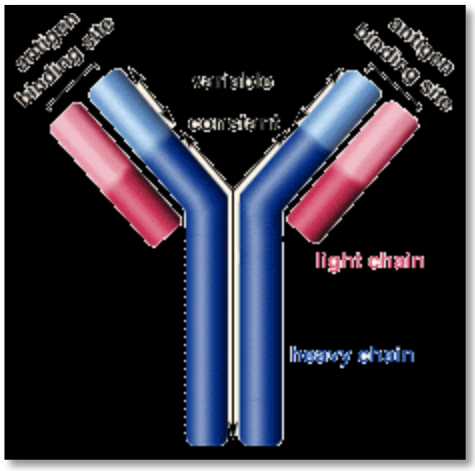
Q54: anti –inflammation and analgesic drugs, using a medical splint or surgical intervention.

Q55: planarians will regenerate each part grow making new individual.

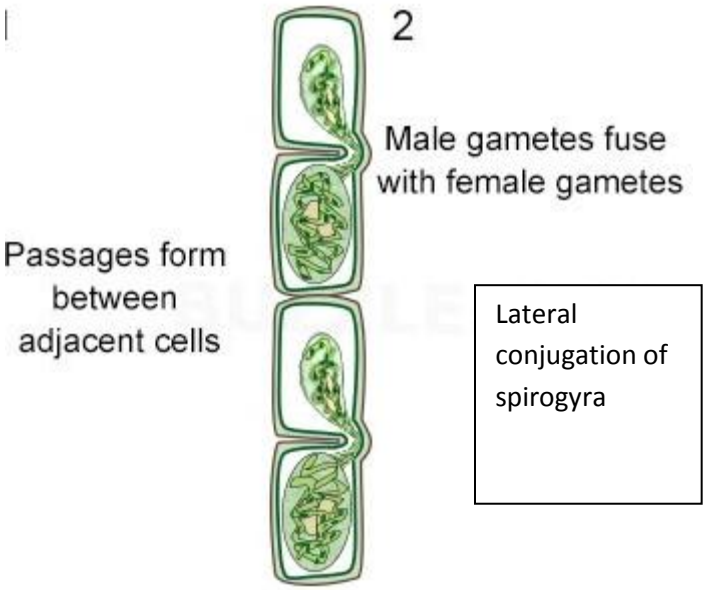
Q56: The stimulates maturity of lymphoid stem cells to T- cells decrease and the immunity of body decrease.

Q57: formation of sperms stop and the man become sterile.

Q58: draw of antibody



Q59: draw



Q60:there is one filament in the place and not to be extinct. to produce new filament(N).