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नाम

NAME Somya

कक्षा

CLASS Bsc. Life Science

सेमेस्टर

SEMESTER IInd

रोल नं.

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विषय

SUBJECT Cell development and Biology

पेपर नं.

PAPER NO.

*अतिरिक्त प्रयुक्त उत्तर पुस्तिकाओं की संख्या

No. of continuation books used

7/2
8

Ques 1: Briefly explain Gametogenesis in mammals with the help of suitable diagram? - 3 marks

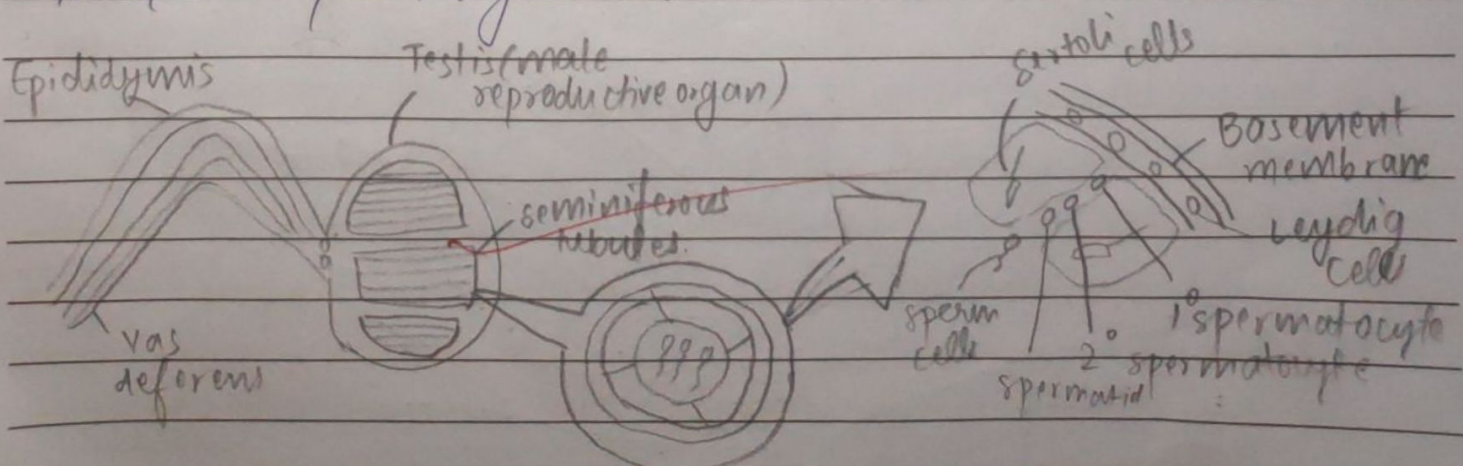
Ques 2: Write down the classification of types of egg on the basis of amount of yolk, distribution of yolk and presence or absence of egg shell? - 3 marks

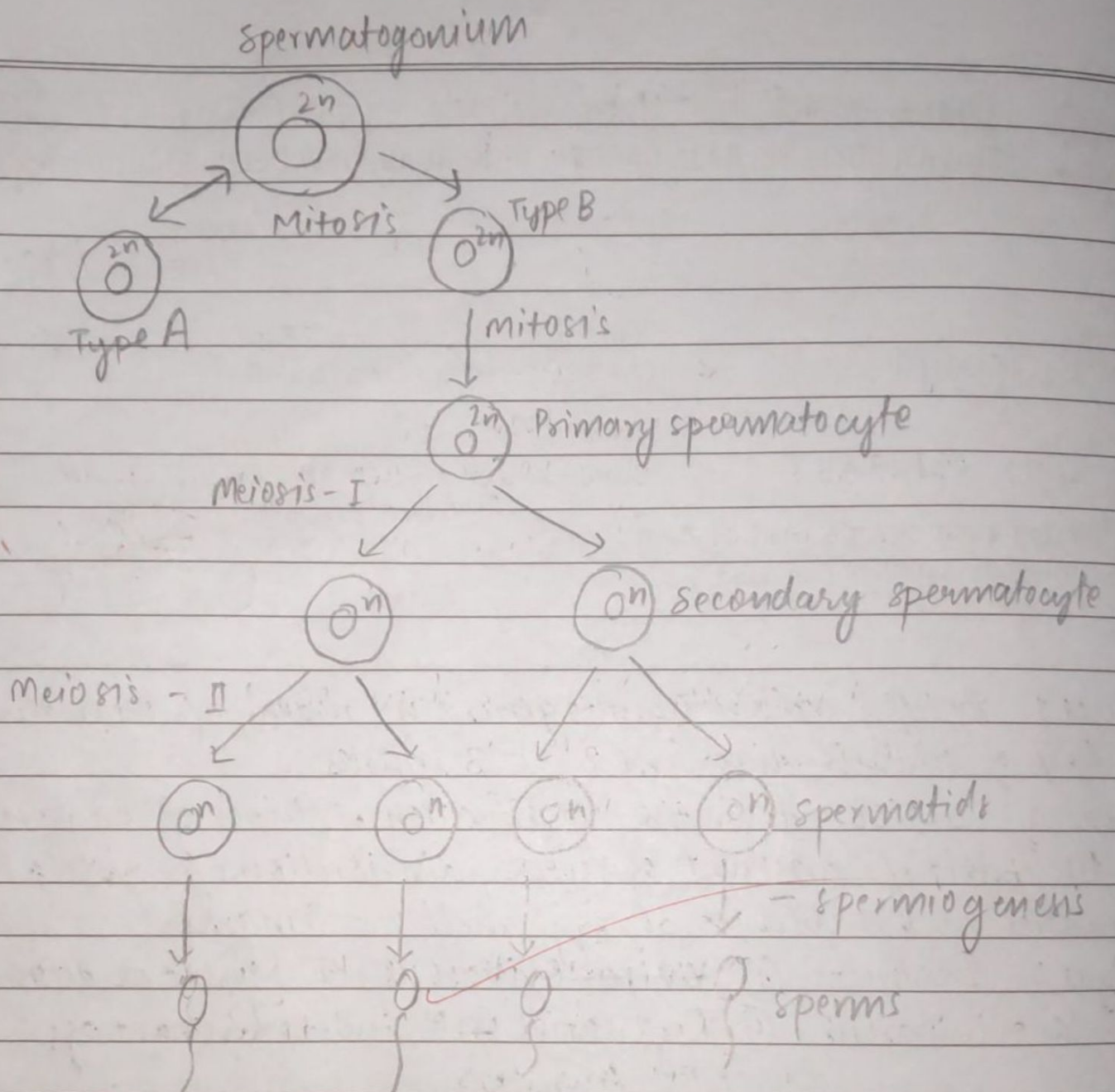
Ques 3: Define - (1) Vivipar (2) Oviparous (3) Mosaic or determinant (4) Ovoviviparous (5) Regulative or indeterminate eggs

Answers

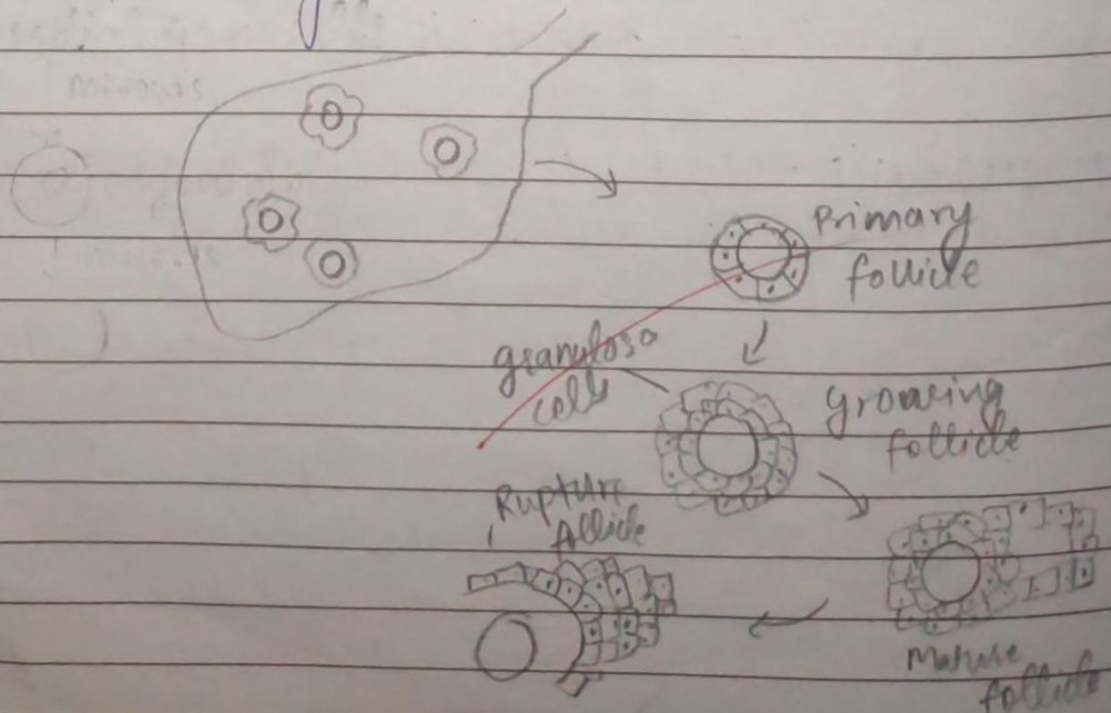
Ans 1: Process of formation of specialised cells / germ cells is k/as ^{sex} gametogenesis. The male gamete is k/as sperm whereas the female gamete is k/as ovum.

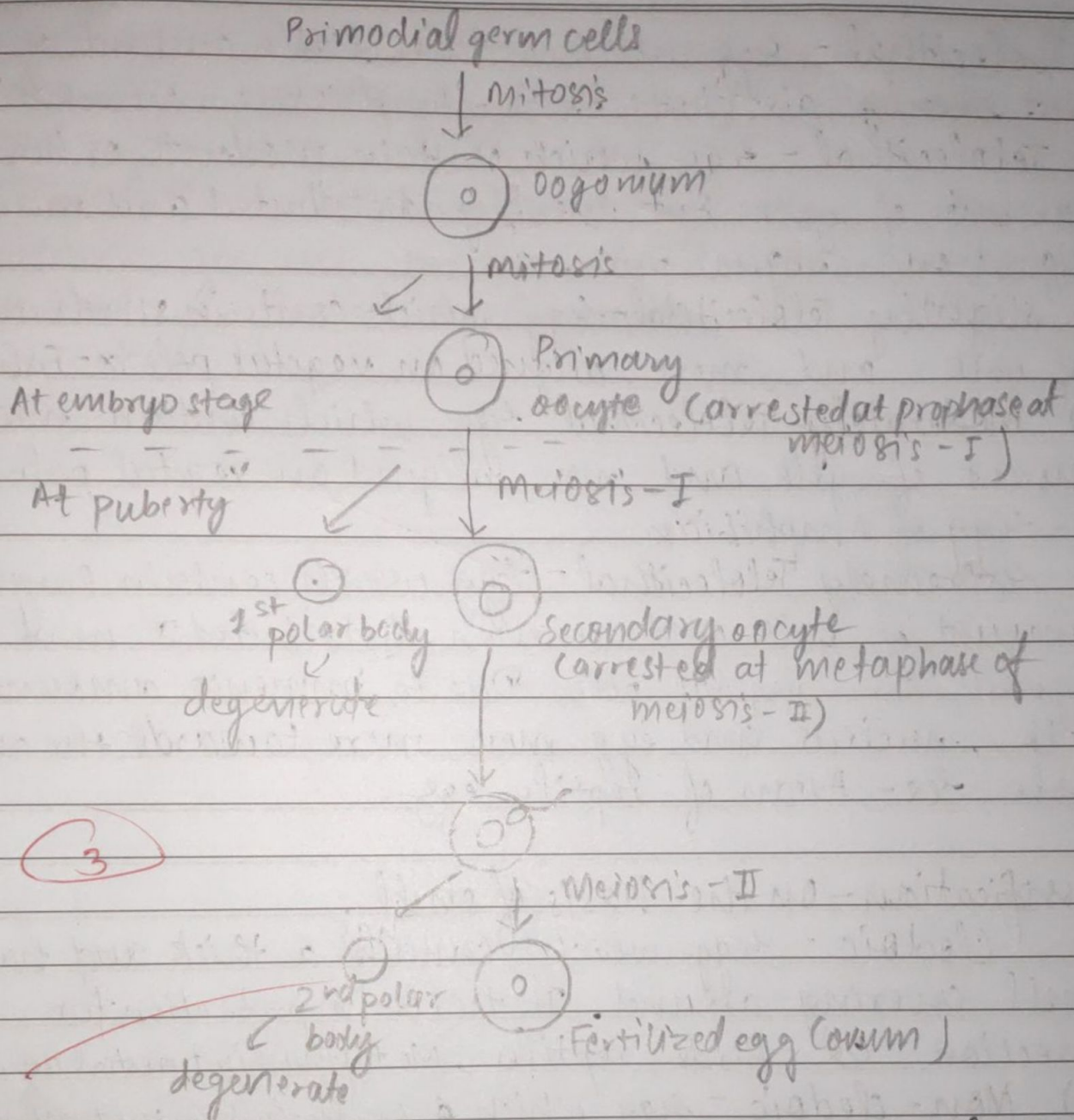
Spermatogenesis - Process of formation of male germ/sex cells is k/as Spermatogenesis.





Oogenesis - Process of formation of female germ cells - oocyte/
 ovum is k/a oogenesis





Ans 2. Classification - on the basis of Amount of yolk

- 1.) Alecithal - egg which contain no amount of yolk.
Ex - egg of Lanthanian - Kangaroo.
- 2.) Microlecithal - egg which contain small to negligible amount of yolk. Ex - Amphioxus, tunicates.
- 3.) Mesolecithal - egg which contain moderate not high amount of yolk. Ex - ~~Dipnoi~~^{not}, Petromyzon in mammals.
- 4.) Macro/Mega/Polylecithal - egg which contain large amount of yolk. Ex - Birds, Prototheria.

Classification - On the basis of distribution of yolk

1.) Isolecithal - egg which contain little amount of yolk but evenly distributed. ex - Amphioxus, echinoderms.

2.) Telolecithal - egg which contain moderate or high amount of yolk but unevenly distributed and more aligned on vegetal pole.

a.) Slightly Telolecithal - egg which contain small amount of yolk and more aligned on vegetal pole ex - Fish's egg

b.) Moderately Telolecithal - egg which contain moderate amount of yolk and more aligned on vegetal pole.

ex - egg of Amphibian

c.) extremely Telolecithal - egg which contain large amount of yolk and uneven distributed & more aligned on vegetal pole. Due to immense amount of yolk, nucleus and egg move more towards the animal pole. ex - Avian or reptile egg.

Classification - on the basis of shell.

1.) Cleidoic - egg which ^{has} contain a thick and hard shell covering around. It helps in protection for dissection. ex - Birds, reptiles. Mostly found in terrestrial animals.

2.) Non-cleidoic - egg which only has a soft membrane as their covering. It has sufficient water. It is mostly found in aquatic animals. ex - Mammals, Oviparous animals.

Ans 3. (1) Oviparous - Animals which give birth to their young ones in the form of an egg. ex - Reptiles, Birds.

(2) Mosaic or determinant egg - egg in which each portion is predetermined with respect to its potential for further development. ex - Annelids, molluscs.

(3) Ovoviviparous - Animals which contain baby in

their body in the form of egg but release it from the body as a viviparous, (without an egg) ex - shark.

4.) Regulative or indeterminant egg - egg in which portions are not predetermined with respect to its potential for further development.