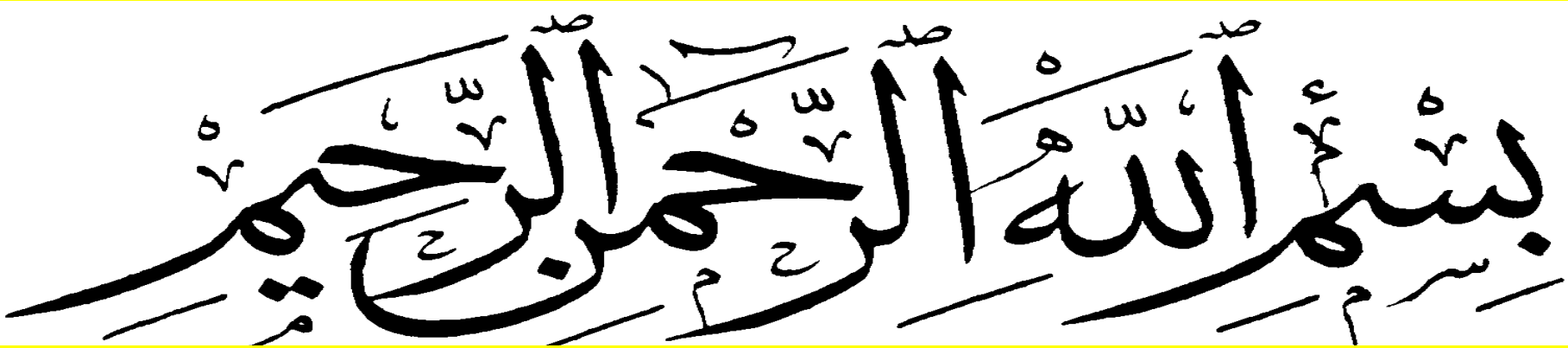
بسم الله الرحمن الرحيم

The only language the baby knows, is to cry.

- Oocytes are produced by the ovaries (oogenesis) and expelled from them during ovulation.
- The fimbriae of the uterine tube sweep the oocyte into the ampulla where it may be fertilized.

- As it passes along the uterine tube toward the uterus, the zygote undergoes cleavage (a series of mitotic cell divisions) into a number of smaller cells-blastomeres.
- Approximately 3 days after fertilization, a ball of 12 or more blastomeres-a morula-enters the uterus.

A cavity forms in the morula, converting it into a blastocyst consisting of the embryoblast, a blastocystic cavity, and the trophoblast.

The trophoblast encloses the embryoblast and blastocystic cavity and later forms extraembryonic structures and the embryonic part of the placenta.

Four to 5 days after fertilization, the zona pellucida is shed and the trophoblast adjacent to the embryoblast attaches to the

ENDOMETRIAL EPITHELIUM.

- The trophoblast at the embryonic pole differentiates into two layers, an outer syncytiotrophoblast and an inner cytotrophoblast.
- The syncytiotrophoblast invades the endometrial epithelium and underlying connective tissue. Concurrently, a cuboidal layer of hypoblast forms on the deep surface of the embryoblast.
- By the end of the first week, the blastocyst is superficially implanted in the endometrium.

UTERUS AT TIME OF IMPLANTATION

The wall of the uterus consists of three layers:

(1) endometrium or mucosa lining the inside wall;

(2) myometrium, a thick layer of smooth muscle; and

(3) perimetrium, the peritoneal covering lining the outside wall .

- From puberty until menopause, the endometrium undergoes changes in a cycle of approximately 28 days under hormonal control by the ovaries.
- During this menstrual cycle, the uterine endometrium passes through three stages,
- **The follicular or proliferative phase,**
- **The secretory or progestational phase, a**
- **The menstrual phase.**

- The proliferative phase begins at the end of the menstrual phase, is under the influence of estrogen, and parallels growth of the ovarian follicles.
- The secretory phase begins approximately 2 to 3 days after ovulation in response to progesterone produced by the corpus luteum.

- If fertilization does occur, the endometrium assists in implantation and contributes to formation of the placenta. Later in gestation, the placenta assumes the role of hormone production, and the corpus luteum degenerates.

9. The most common site for implantation in ectopic pregnancy is:

A. internal os of the uterus
B. mesentery
C. ovary
D. uterine tube
E. other

D

THANKS