ANSWERS FOR EMBRYOLOGY SLIDE REVIEW MARATHON SENT ON (WEDNESDAY 7TH JUNE 2017)

Number 1 (spermatogenesis)

A- spermatocytogenesis / mitosis

B- primary spermatocyte

C- First meiosis

D- secondary spermatocyte

E- second meiosis

F- spermatids

G- spermiogenesis

Number 2: (mature Graafian follicle)

A- corona radiata

B- zona pellucida

C- oocyte

D- follicular antrum

E- Granulosa cells

F- Theca

G- cumulus oophorus

Number 3

(Left diagram)

A- zona pellucida

B- oocyte

C- polar body

(Right diagram)

A- blastocoel

B- trophoblast

C- embryoblast

Number 4

A- trophoblastic lacunae

B- syncytiotrophoblast

C- cytotrophoblast

D- amniotic cavity

E- epiblast

F- hypoblast

G- exocoelomic/ Heuser's membrane

H- Umbilical vescicle

Number 5(epiblast)

A- notochord

B- primitive pit

C- primitive node

D- primitive groove

Number 6- sacrococcygeal teratoma = Failure of degeneration of primitive streak

(What type of cells does it have?)

Number 7

A- exocoelomic/ Heuser's membrane

B- intraembryonic coelom

C- intermediate mesoderm

D- neural tube

E- Paraxial mesoderm

F- Notochord

G- somatic lateral mesoderm

H- splanchnic lateral mesoderm

I- surface ectoderm

J- primordial gut

K- secondary Umbilical vescicle

L- amniotic cavity

Number 8

A- surface ectoderm

B- neural folds

C- neural crest

D- Notochord

Number 9

(left diagram)

A- epimere

B- hypomere

C- dorsal rami of spinal nerve

(Right diagram)

A- epimere

D- ventral rami of spinal nerve

Number 10

(from left to right)

:Prune Belly syndrome - Failure of migration and fusion of anterior abdominal wall muscles

:Poland syndrome- abscence of pectoralis major

;Congenital arthrogryposis congenita - rigidity of joints due to absence of muscles.

Number 11

(Left diagram)

A- secondary chorionic villi

B- trophoblastic lacunae

C- connecting stalk

D- amniotic cavity

E- Umbilical vescicle

F- exocoelomic cavity

G- splanchnic lateral mesoderm

H- cytotrophoblast

I- cyncitiotrophoblast

(Right diagram) - craniocaudal embryonic folding =Recall results of both craniocaudal and lateral folding

A- septum transversum

B- amnion

C- allantois

D- exocoelomic membrane

Number 12(from left to right)

: constriction band-

Merkels diverticulum - persistence of connecting stalk

Digital amputation-

Urachal fistula - Failure of degeneration of Urachas

Number 13

(Left diagram)

A- smooth chorion

B- Decidua capsularis

C- Chorionic Cavity

D- Decidua parietalis

E- Decidua basalis

F- Chorion frondosum

G- amniotic cavity

H- Secondary Umbilical vescicle

(Right diagram)

I- amniochorionic membrane

J- amniotic cavity

Number 14

(from left the right-first row of placentas)

Placenta velamentosa

Bilobed membranacea

Battledore Placenta

(Second row from left to right)

Placenta Previa

Placenta accreta

Placenta increta

Placenta percreta

Number 16- The Placenta

Circumvillate Placenta - Fetal membranes have doubled-back on the Placenta.

Number 18

(From left to right)

Craniopagus

Thoraco-abdomino-pygopagus

Pygopagus

Thoracopagus

Number 19

(Right diagram)

A- surface ectoderm

B- mesenchyme

(Left diagram)

C- periderm

D- basal layer

E- Mesenchyme

Number 20(from left to right)

Pot- wine syndrome

Carvenous hemangioma

Hypertrichosis

Itchthyosis vulgaris

Albinism

Alopecia

Anoninchia- absence of nails

Number 21(from left to right)

A- milk line, mammary ridge / mammary crest

A- surface ectoderm

B- mesenchyme

C- primary mammary bud

D- mammary pit

E- lactiferous duct

Number 22(from left to To right)

Amastia

Polythelia

Polymastia

Inverted nipples

Gynecomastia

Poland syndrome

Number 23

(left diagram)

A- pharyngeal arches

B- Developing Heart

C- developing lower limb bud

D- somites

(Right diagram)

A- Mesenchyme

B- zone of ploriferation

C- Apical ecodermal ridge = Patterns limb bud growth in a proximo-distal axis

D- zone of polarizing activity- Patterns limb bud growth in an antero-posterior axis

Number 24

(from left to right)

Amelia

Congenital absence of radius

Phocomelia

Lobster hand

Limb amputation

Pre-axial polydactyly

Club foot

Number 25(from left to right)

Achondroplasia

Syndactyly

Congenital dislocation of the hip joint

Polydactyly

Macrodactyly

Number 26 neuro so recall their derivatives

(Left diagram)

A- cranial neuropore

B- somites

C- caudal neuropore

(Right diagram)

A- telencephalon

B- Diencephalon

C- optic vescicles

D- mesencephalon

E- metencephalon

F- myelencephalon

Number 26

(From left to right)

Raschisis

Acrania coupled with anencephaly

Spina bifida occulta

Spina bifida cystica

Spina bifida cystica

Hydrocephalus

Microcrania

Crania bifida