# Description: col LOGO outline

Date:

Registration number:

**St. Joseph’s College (Autonomous), Bengaluru-27**

**B.Sc. Zoology - VI Semester**

**Semester Examination: April 2022**

**(Examination Conducted In July 2022)**

**Zo 6215 - Developmental Biology, Evolution, and Zoogeography**

**Time- 2 ½ hrs Max Marks-70**

**This paper contains THREE printed pages and THREE parts**

**PART A**

**Answer ALL of the following Marks: 1 X 15 = 15**

1. \_\_\_\_\_\_\_\_\_\_\_ contended the only contributions of the female to the next generation were the womb in which the homunculus grew and had prenatal influences
2. Spermists
3. Ovists
4. Proponents of epigenesist
5. Proponents of biogenetic law
6. According to biogenetic law, less general characters are developed from the more general, until finally the \_\_\_\_\_\_\_\_\_\_\_
7. Least specialized appear
8. Most specialized appear
9. Both a & b
10. d. No new characters appear
11. Amount of yolk and its distribution are changed in the egg. Which one is affected?
    1. pattern of cleavage
    2. formation of zygote
    3. number of blastomeres
    4. fertilization.
12. Meroblastic cleavage is a division which is
    1. Horizontal
    2. Partial
    3. Total
    4. spiral
13. Termination of gastrulation is indicated by
    1. obliteration of blastocoel
    2. obliteration of archenteron
    3. closure of blastopore
    4. closure of neural tube.
14. Covergence is exhibited by………………..cells during frog gastrulation
15. Macromeres only
16. Micromeres only
17. Macro and micromeres
18. None of them
19. Grey crescent is the area
    1. at the point of entry of sperm into ovum
    2. Just opposite to the site, of entry of sperm into ovum
    3. at the animal pole
    4. at the vegetal pole.
20. Gonads develop from ………………..mesoderm
21. Splanchnic
22. Somatic
23. both
24. Dermatome
25. Hypermetabolism during pregnancy is induced by ……………..
26. hCG
27. human Thyrotropin
28. Relaxin
29. Progesterone
30. Ovulation occurs on \_\_\_\_\_\_\_\_\_\_ day of menstrual cycle
    1. 12
    2. 16
    3. 14
    4. 20

1. ………………..is an example of analogous organs
   1. Fore limbs of whale and bat
   2. Flippers of Dolphin and penguin
   3. Vertebrate hearts
   4. Vertebrate brains
2. Trilobites were alive during the
3. Cenozoic
4. Mesozoic
5. Paleozoic
6. Cretaceous
7. Merichippus has ….. digits
   1. 2
   2. 3
   3. 4
   4. 5
8. The Major trends in the evolution of horse were connected toFeeding and locomotion (True /False)
9. Lucy-the oldest human fossil is
10. Ramapithecus
11. Australopithecus
12. *Homo habilis*
13. *Homo erectus*

**PART B**

**Answer any FIVE of the following Marks: 5 X 5 = 25**

1. Compare the features of amphioxus and frog blastula.
2. Draw and label the parts of Cleidoic egg.
3. Sketch the formation of Amnion and Chorion in chick embryo.
4. Describe the changes in trophoblast during implantation of pre-embryo.
5. Sketch the adaptive radiation of Mammals.
6. Enumerate the time period and significant life skills possessed by Cro-magnon.
7. With examples briefly explain the pre-zygotic isolation mechanisms.

**PART C**

**Answer any THREE of the following Marks: 10 X 3 = 30**

1. Define induction. Explain competence with reference to development of amphibian eye.
2. ‘Fertilization restores parental diploid configuration’. Explain the steps involved in accomplishing it.
3. Natural selection is an elementary force of evolution- Substantiate with types and examples.
4. Define dating of fossils and explain the C-14 method.

**\*\*\*\*\*\***