

1. If an organism has 14 chromosomes, the number of chromosome generated by nullisomy will be

a) 15

b) 7

c) 13

d) 12

2. Turner's syndrome is a result of

a) Nullisomy

b) Monosomy

c) Trisomy

d) Polysomy

3. Euploidy is a chromosomal variation in

a) Size

b) Position of genes

c) Number

d) Structure

4. Which of the following will be sterile?

a) Tetraploid

b) Triploid

c) Diploid

d) Monoploid

5. Normal wheat *Triticum aestivum* is

- a) Monoploid
- b) Tetraploid
- c) Pentaploid
- d) **Hexaploid**

6. Which of the molecule in photolyase acts as an electron donor for recovery of the CPD?

- a) NADH
- b) **FADH-**
- c) MTHF poly Glu
- d) NAD+

7. The random abnormal number of chromosomes in the organisms is called:

- (a) Poly, ploid
- (b) Euploid
- (c) **aneuploid**
- (d) None of the above

8. C-value in genome represents

- a) Genetic disorders
- b) Phenotypic variation
- c) **Amount of DNA present in the genome**
- d) Qualitative traits

8. Name the sequences which are present in more than one copy in a haploid genome?

- a) Nonrepetitive DNA
- b) Highly repetitive DNA
- c) Repetitive DNA**
- d) Minisatellite

9. Polyploidy is induced through

- a) Irradiation
- b) Mutagenic chemicals
- c) Ethylene
- d) Colchicine**

10. Nucleocytoplasmic transport mediated through a number of proteins, called

- a) Actin
- b) Nucleoporins**
- c) Ubiquitin
- d) None of the above

11. With respect to their surrounding membrane system, which is the odd one out?

- a) Nucleus.
- b) Endoplasmic reticulum.**
- c) Mitochondria.
- d) Chloroplasts

12. Which of the following is energy independent?

- a) Active transport

- b) Primary active transport
- c) Secondary active transport

d) Passive transport

13. Which of the following transports only one kind of substrate

- a) **Uniport carriers**
- b) Symport carriers
- c) Antiport carriers
- d) Membrane protein

14. Which of the following induces conformational change in protein?

- a) Uniport
- b) Symport
- c) Antiport
- d) **Facilitated diffusion**

15. Nucleus are absent in

- a) Red blood cells and bacterium
- b) Red blood cells, sieve cells and bacterium
- c) Red blood cells only
- d) none of these

16. The light stained and diffused region of chromatin is known as

- a) Heterochromatin
- b) Euchromatin
- c) chromatin

d) none of these

17. The protein network that lines the inner side of nuclear membrane is called

a) Nucleolus

b) nuclear matrix

c) nuclear lamina

d) nuclear proteins

18. Nuclear membrane is in continuous connection with

a) SER

b) RER

c) Golgi apparatus

d) lysosomes

19. 8 filaments about 100nm in length come out from which side of the NPC and they are joined to the ring at the end forming a nuclear basket.

a) nuclear

b) nucleolar

c) cytosolic

d) none of the above

20. The least level of chromosome organization is

(a) 30nm fiber

(b) solenoid

(c) **nucleosome**

(d) none of the above

21. This has the largest number of chromosomes

- (a) *Pisum sativum*
- (b) *Giant redwood tree*
- (c) *Haplopappus gracilis*
- (d) ***Ophioglossum reticulatum***

22. The diagrammatic representation of karyotype(morphological representation of chromosomes) of a species is known as

- (a) Cladogram
- (b) Ecogram
- (c) Chromogram
- (d) **Idiogram**

23. The point at which polytene chromosomes appear to be attached together is known as

- (a) centriole
- (b) centromere
- (c) chromomere
- (d) **chromocentre**

24. In which typical stage are Lampbrush chromosomes observed?

- (a) **meiotic prophase**
- (b) mitotic metaphase
- (c) mitotic prophase
- (d) mitotic anaphase

25. Genes that show tendency to be inherited together is known as

- a) **Linkage group**
- b) Homologous group
- c) Co-dependent genes
- d) None of the mentioned

26. Giant polytene chromosomes are found in

- a) Egg of fruit fly
- b) **Salivary gland of larvae of fruit fly**
- c) Salivary gland of adult fruit fly
- d) All of the mentioned

27. Loops in lampbrush chromosomes represent site of

- a) Replication
- b) **Transcription**
- c) Cell division
- d) Crossing over

28. 1. Conversion of messages carried by mRNA into amino acid sequences is called

- a) Replication
- b) DNA repair
- c) **Translation**
- d) Transcription

29. Prokaryotic ribosome is

a) 80S

b) **70S**

c) 40S

d) 60S

30. Mark the one, which is NOT a stop codon?

a) UAA

b) UAG

c) UGA

d) **GGA**