**Q1- A Mendialian experiment consisted of breeding of tall pea plants bearing violet flowers with short pea plants bearing white flowers. The progeny all bore violet flowers but almost half of it were short. This suggests that the genetic make up of tall parent can be depicted as :**

A)TTWW

B) TTww

C) TtWW

D) TtWw

C

**Q2- Two pink coloured flowers on crossing resulted in 1 and 2 pink and 1 white flower progeny. The nature of cross will be :**

A) Double fertilization

B) Self pollination

C) Cross pollination

D) No fertilization

C

**Q3- The two versions of trait which are brought in by female and male gametes are situated at :**

A) Copies of same chromosomes

B) Two different chromosomes

C) Sex chromosomes

D) Any chromosomes

A

**Q4- From below, select the character that is acquired not inherited ?**

A) Colour of eye

B) Colour of skin

C) Size of body

D) Nature of hair

**C**

**Q5- A cross between tall plant (TT) and short pea plant (tt) is inherited in progeny that were all tall plants because :**

A) Tallness is dominant character

B) Shortness is dominant character

C) Tallness is recessive trait

D) Height of pea plant is not governed by gene T or t

A

**Q6- If a round green seeded plant (RRyy) is crossed with wrinkled, yellow seeded plant (rrYY),the seeds produced in F1 are :**

A) Round and yellow

B) Round and green

C) wrinkled and green

D) wrinkled and yellow

A

**Q7- Select the correct statement.**

A) Tendril of pea plant and phylloclade of opuntia are homologous

B) Tendril of pea plant and phylloclade of opuntia are analogous

C) wings of birds and limbs of lizards are analogous

D) wings of birds and wings of bat are homologous

B

**Q8- In peas, a pure tall plant (TT) is crossed with a short plant (tt). The ratio of pure tall to short plants in F2 is ?**

A) 1:3

B) 3:1

C) 1:1

D) 2:1

C

**Q9- New species may be formed if \_\_\_\_\_\_.**

A) DNA do not undergoes significant changes in germ cells

B) Chromosomes number changes in gametes

C) There is no change in genetic material

D) Mating does not take place :

B

**Q10- The number of sex chromosomes in zygote of humans is\_\_\_\_\_\_\_.**

A) 1

B) 2

C) 3

D) 4

C

**Q11- Select the group which shares the maximum number of common characters?**

A) Two individuals of a species

B) Two species of genus

C) Two genera of a family

D) Two genera of two families

A

**Q12- In human males all the chromosomes are paired perfectly except one. These unpaired chromosomes are \_\_\_\_\_\_\_.**

A) large chromosomes

B) small chromosomes

C) Y chromosomes

D) Z chromosomes

C

**Q13- If the fossil of an organism is found in the deeper layers of earth, then we can predict that \_\_\_\_\_\_\_\_\_\_.**

A) The extinction of organism has occured recently

B) The extinction of organism has occured years ago

C) The fossil position in the layers pf earth is not related to its time of extinction

D) Time of extinction can not be determined

A

**Q14- In evolutionary terms , we have more in common with \_\_\_\_\_\_\_\_\_\_\_\_\_.**

A) A chinese boy

B) A chimpanzee

C) A spider

D) A bacteria

A

**Q15- An example of homologous organs are \_\_\_\_\_\_\_\_\_\_\_.**

A) Our arm and dog s fore leg

B) Our teeth and elephants tusks

C) Potato and runners of grass

D) All

D

**Q16- According to evolutionary theory, formation of a new species is generally due to \_\_\_\_\_\_\_\_.**

A) Sudden creation of nature

B) Accumulation of variations over several generations

C) Clones formed during sexual reproduction

D) Movement of individuals from one habitat to another

**B**

**Q17- Some dinosaurs had feathers although they could fly but birds have feathers that help them to fly. In the context of evolution this means that -----------.**

A) Reptiles have evolved from birds

B) There is no evolutionary connection between reptiles and birds

C) Feathers are homologous organs in both structures

D) Birds have evolved from reptiles

D

**Q18- Which of the following is totally impossible outcome of Mendel's Experiment?**

A) 3 tall 1 short

B) 24 tall 8 short

C) 8 tall 0 short

D) 4 tall 1 medium height

D

**Q19- Which of the following is not a direct conclusion that can be drawn from Mendel's Experiment?**

A) Only one parental trait is expressed

B) Two copies of each trait is inherited in sexually transmitted organism

C) For recessive trait to be expressed , both copies should be identical

D) Natural selection can alter frequency of inherited trait

D

**Q20- Which section of DNA provides information for one protein?**

A) Nucleus

B) Trait

C) chromosome

D) gene

D

**Q21- What is the probability that the male progeny will be a boy?**

A) 50%

B) 56%

C) 45%

D) it varies

A

**Q22- Who have a perfect pair of sex chromosomes?**

A) Girls

B) Boys

C) Both

D) It depends upon many factors

A

**Q23- With whom you can associate theory of evolution?**

A) Charles Darwin

B) Mendel

C) Stanley miller

D) Harold urey

A

**Q24- Which of the following can be called a characteristic?**

A) plants can photosynthesise

B) we have two eyes

C) Mango tree is multicellular

D) All

D

**Q25- Which of the following statements is not true with respect to variation?**

A) All variations in a species have equal chance of survival

B) Change in genetic composition results in variation

C) Selection of variants by environmental factors forms the basis of evolutionary D) processes.

D) Variation is minimum in asexual reproduction

A

**Q26- A trait in an organism is influenced by\_\_\_\_\_\_\_\_\_\_.**

A) paternal DNA

B) Maternal DNA

C) Both paternal and maternal DNA

D) None

C

**Q27- Select the group which shares maximum number of common characters ?**

A) two individuals of a species

B) two individuals of a same genus

C) two individuals of a same order

D) two individuals of a same families

A

**Q28- According to the evolutionary theory, formation of a new species is generally due to \_\_\_\_\_.**

A) sudden creation by nature

B) accumulation of variations over several generations

C) clones formed during asexual reproduction

D) movement of individuals from one habitat to another

A

**Q29- Which of the following is totally impossible outcome of Mendel's experiment ?**

A) 3tall 1 short

B) 24 tall 8 short

C) 8 tall 0 short

D) 4 tall and 1 medium height

D

**Q30- Which one is possible progeny in F2 generation of pure breed tall with round seed and short plant with wrinkled seed ?**

A) Tall plant with round seed

B) Tall plant with wrinkled seed

C) short plant with round seed

D) all

D

**Q31- Which of the following is not controlled by genes ?**

A) weight of a person

B) height of a person

C) Only 1

D) sometimes one sometimes 2

C

**Q32- Homologous organs have \_\_\_\_\_\_**

A) same structure same function

B) different structure different function

C) same structure different function

D) different structure same function

C

**Q33- The rule of \_\_\_\_\_determines the process by which traits and characteristics are reliably inherited .**

A) Heredity

B) Reproduction

C) generation

D) none

A

**Q34- DNA is the information source for making \_\_\_in cells .**

A) fats

B) vitamins

C) proteins

D) all

C

**Q35- If this enzyme works efficiently then \_\_\_\_\_\_\_\_\_\_.**

A) a lot of hormone is made

B) a plant will be tall

C) both a and b

D) none

C

**Q36- Each cell has two copies of each chromosome \_\_\_\_\_\_\_\_.**

A) one each from male and female parents

B) from male parent

C) from female parent

D) any of above

A

**Q37- In few reptiles, the \_\_\_ at which fertilized eggs are kept determines the sex of offspring .**

A) temperature

B) pressure

C) place

D) all

A

**Q38- Men have a \_\_\_ pair of sex chromosomes .**

A) perfect

B) matched

C) mismatched

D) any of above

**C**

**39. The basket of vegetables contains carrots, potato, radish and tomato. Which of them represents the correct homologous structures ?**

A. carrot and Potato

B. Carrot and Tomato

C. Radish and carrot

D. Radish and potato

C

**40. A character which is expressed in hybrid is always \_\_\_\_\_\_\_\_.**

A. Dominant

B. Recessive

C. Co-dominant

D. Epistatic

**A**

**Q41- The frequency of certain genes in a population changed over generations. This is the essence of the idea of \_\_\_**

A) Revolution

B) Evolution

C) Reproduction

D) production

B

**Q42- Theory of evolution is given by \_\_\_\_\_.**

A) JBS Haldane

B) Stanley

C) Charles Darwin

D) Gregor Mendel

C

**Q43- The preserved traces of living organisms are called \_\_\_\_\_\_\_\_.**

A) Fossils

B) Species

C) Non living materials

D) None

A

**Q44- Following have four limbs\_\_\_\_\_\_\_\_.**

A) Mammals

B) Amphibians

C) Reptiles

D) All

D

**Q45- \_\_\_is used for studying human evolution .**

A) Excavating

B) Time dating

C) Determining DNA sequence

D) All

D

**Q46- The earliest member of human species, Homosapiens can be traced from :**

A) West asia

B) Australia

C) East asia

D) Africa

D

**Q47- The exchange in genetic material takes place in \_\_\_\_\_.**

A) vegetative propagation

B) Asexual reproduction

C) sexual reproduction

D) budding

C

**Q48- Which of the following statements is incorrect ?**

A) for every hormone there is a gene

B) For every protein there is a gene

C) For production of every enzyme there is a gene

D) For every fat molecule there is a gene

D

**Q49- The maleness of a child is determined by \_\_\_.**

A) X chromosome in zygote

B) Y chromosome in zygote

C) The cytoplasm of germ cells which determines the sex

D) Sex is determined by chance

B

**Q50- Select the incorrect statement :**

A) Frequency of certain genes in a population change over several generations resulting in evolution

B) Reduction in weight of organism due to starvation is genetically controlled

C) Low weight parents can have heavy weight progeny

D) Traits which are not inherited over generation do not cause evolution

B