

MOCK CET PAPER 6

Answer key with solution

- 1) Answer=2, BAP is a synthetic cytokinin and all others are synthetic auxins. Auxins play an important role in apical dominance
- 2) Answer =1, is micturition
- 3) Answer=2, helicase enzyme helps in unwinding the DNA double strands
- 4) Answer=1, caryopsis is a dry indehiscent fruit where in fruit wall and seed coat remains fused
- 5) Answer=4, mesophyll are undifferentiated in C4 plants
- 6) Answer=3, speciation is the outcome of all evolutionary forces. The evolutionary forces are recombination, mutation, gene flow, genetic drift, selection and isolation
- 7) Answer=2, meristems are usually virus free
- 8) Answer=4, B and O because, the genotypes of B blood groups is $I^B I^O$ (heterozygous) and the gametes formed from them are I^B and I^O ; the combinations in progeny would be $I^B I^B$ or $I^O I^O$
- 9) Answer=2, uric acid
- 10) Answer=1, vitamin K is required for formation of prothrombin
- 11) Answer=1, oxytocin is a peptide and all others are steroids
- 12) Answer=4, TMV, WTV, Rous sarcoma, HIV are all RNA viruses
- 13) Answer=4, habitate where the animal lives and it is one of the primary need along with food and mating
- 14) Answer=2, increases because water moves from higher water potential to lower water potential
- 15) Answer=3, rheumatoid disease is an auto immune disease
- 16) Answer=1
- 17) Answer=2 based on origin they are secondarily derived
- 18) Answer=1
- 19) Answer=4
- 20) Answer=3, thyroxin is essential for larval metamorphosis in amphibians
- 21) Answer=3
- 22) Answer=4, viral disease
- 23) Answer=4, PCR technique is used to amplification of DNA
- 24) Answer=4, interferon are antiviral substances produced when viral infection occurs
- 25) Answer=2, by experience aphid pierces its style directly into phloem and when stylet is cut phloem sap comes out

- 26) Answer=1, anaerobic respiration does not consume oxygen, therefore the ratio of CO₂ evolved/O₂ consumed becomes so high
- 27) Answer=1, consensus reached on reducing the emission of green house gases in Kyoto Japan
- 28) Answer=both secondary oocyte and ootid are haploid
- 29) Answer=2, platihelminthes have flame cells as excretory organs
- 30) Answer=3, soon after meal sugar increases in blood because of carbohydrate digestion and absorption and in NIDDM sufficient quantity of insulin is produced but not utilized by cells due to resistance of cells to insulin
- 31) Answer=2, spring wood is early wood where as autumn wood is late wood
- 32) Answer=3, BAP a synthetic cytokinin is responsible for delay in senescence, known as Richmond –Long effect and ABA is plant growth retardant which promotes abscission layer and senescence
- 33) Answer=3, endosmosis occurs whenever water potential decreases in guard cells, in other words increase in osmotic potential makes the guard cells(decrease in water potential) draws water from the surrounding subsidiary cells
- 34) Answer=4, Okazaki fragments are synthesized on lagging stands and RNA synthesis occurs on antisense strand of DNA
- 35) Answer=4, it would have been mollusca –gastropoda –pila globosa
- 36) Answer=4, hypothalamus maintains body temperature and homeostasis
- 37) Answer=viroids are RNA particles without proteins that causes disease only to plants and all other diseases are caused by prions
- 38) Answer=4, colchicines helps in chromosomal doubling
- 39) Answer=4
- 40) Answer=3, at the end not only ATP but also NADPH are synthesized
- 41) Answer=Root pressure is responsible for guttation, root pressure is the pressure exerted due to the metabolic activity in roots cells
- 42) Answer=1 all are salient feature of apocyanaceae
- 43) Answer=3, mosaic vision means sum of all partial vision. This is a contribution of several ommatidia
- 44) Answer=1 Eri silk worm feeds on castor plant

- 45) Answer=1, nematodes / round worms/ aschelminthes are pseudocoelomates
- 46) Answer=3, RBC not filtered. It is more than 80\AA
- 47) Answer=1) Chlorophyll b moves slowly where as carotene moves fast: this is based on adsorption and differential movement
- 48) Answer=1) A=s, B=r, C=q, D=p
- 49) Answer=3) Root hairs are short lived and are continuously replaced by new root hairs
- 50) Answer=2, pancreas is not derivative of ectoderm but it is derivative of endoderm
- 51) Answer=4, all are functional stages of lysosome
- 52) Answer=4
- 53) Answer=4, in SCID patients lack of functional T lymphocytes due to absence of ADA gene
- 54) Answer=1
- 55) Answer=1, FSH is gametokinetic factor
- 56) Answer=2, cerebellum
- 57) Answer=2, it is an example for autosomal monosomy
- 58) Answer=2, liver cirrhosis is associated with excessive consumption of alcohol, alcoholic hepatitis
- 59) Answer=1, Kaziranga national park
- 60) Answer=3, 50%