**Detailed Study Guide for Grade 11 Biology Exam 2017**

**Diversity:-**

Species concepts, species naming, kingdom classification, species diversity, prokaryotes vs eukaryotes cells/organisms, protists (amoeba, paramecium, algae and euglena), lichen, characteristics of animals and arthropods, viruses, fungi, difference between the two types of angiosperms.

Practice Questions:

|  |  |
| --- | --- |
| Page Number | Question Number |
| 16 | 1-4,6,7,10 |
| 23 | 5,6 |
| 30 | 1,2,6d |
| 45 | 1-8 |
| 58 | 7,12 |
| 78 | 1,2,8,9 |
| 83 | 1-8 |
| 86 | 1-10 |
| 104 | 9 |
| 110 | 1,2,7,14 |
| 124 | 9,10 |
| 137 | 1-8 |
| 145 | 1-11 |

**Genetics:-**

Cell cycle and ex. of cells of different cell cycle, artificial insemination, genetic crossing-mono hybrid and dihybrid (practice some problems from your textbook), homozygous vs heterozygous, pedigree charts- know how to transform description into a chart- know the symbols, reading a pedigree chart and figuring out the disorders, type of inheritance-x-linked, autosomal, recessive and dominant, sex-linked traits and how to do crosses and disorders associated with x-linked traits, multiple alleles, co-dominance vs incomplete dominance, mitosis and meiosis – different stages.

Practice Questions:

|  |  |
| --- | --- |
| Page Number | Question Number |
| 168 | 13,14,17 |
| 181 | 1,2,3,5,7,8,13 |
| 190 | 3 |
| 195 | 1-8 |
| 198 | 1-10 |
| 207 | 2,4,6,7,8,11,12 |
| 218 | 1,2,5,6,8,9,11 |
| 227 | 3,7,8,9 |
| 250 | 1,3,6,7,9 |
| 259 | 10,12 |

**Evolution:-**

Adaptation to evolution- different morphological features, selective advantage, Lamarack and Darwin theory of evolution, changes in population due to evolution, concept of descent with modification vs concept of inheritance of acquired characteristics, homologous vs analogous features, evidence of evolution-fossils, anatomy and DNA, genetic drift- bottleneck effect vs founder effect, selection patterns in speciation, sexual selections, types of speciation, pre and post zygotic isolating mechanism, divergent vs convergent evolution.

Practice Questions:

|  |  |
| --- | --- |
| Page Number | Question Number |
| 304 | 1,3,4,7 |
| 311 | 1,2,3,4,7 |
| 319 | 1-8 |
| 331 | 5-8,11,13 |
| 340 | 5,7,8,9,10,11,12 |
| 343 | 1-8 |
| 359 | 4,7,8,9 |
| 373 | 1,6 |
| 379 | 1-8 |
| 392 | 1-10 |

**Body Systems:-**

Nutrients-macromolecules, how nutrients are broken down, pancreatic juices, intestine structure, diabetes, respiratory system structure, digestive system structure, digestive enzymes-substrate into products, emphysema, blood components, blood clotting, blood pressure, blocked vessels-how, why, what and treatment, diagram of the heart-label, function and flow of blood.

Practice Questions:

|  |  |
| --- | --- |
| Page Number | Question Number |
| 410 | 1,2,7,10,15 |
| 419 | 1,2,8,11 |
| 427 | 16 |
| 435 | 1-8 |
| 438 | 1-10,13,14,15 |
| 449 | 5,6 |
| 454 | 3,5,8,9 |
| 471 | 1-8 |
| 475 | 1-10 |
| 488 | 2,9,10,13 |
| 493 | 6,7 |
| 503 | 1,2,3 |