1. **Animal Sciences**: Study of animal behavior, classification, development, pathology, taxonomy; animal ecology, animal genetics, animal husbandry, circadian rhythms, cytology, entomology, herpetology, histology, ichthyology, ornithology, paleontology, physiology, studies of invertebrates, etc.

2. **Behavioral & Social Sciences**: Human behavior, social and community relationships; anthropology, archaeology, circadian rhythms, educational testing, ethnology, learning, linguistics, perception, psychology, sociology, urban issues, etc.

3. **Biochemistry**: Chemistry of life processes; enzymes, food chemistry, hormones, metabolism, molecular biology, molecular genetics, photosynthesis, protein chemistry, etc.

4. **Chemistry**: Study of nature and composition of matter and laws governing it; fuels; inorganic chemistry, organic chemistry (other than biochemistry), physical chemistry; materials, metallurgy, pesticides, plastics, soil chemistry, etc.

5. **Computer Science**: Study and development of computer hardware; programming languages; networking and communications; robotics control systems; simulations/virtual reality or computations science (including data structures, encryption, coding and information theory); algorithms, artificial intelligence, data bases, graphics, software engineering, etc.

6. **Earth & Planetary Science**: Climatology, geography, geology, geophysics, meteorology, mineralogy, oceanography, paleontology, physiography, seismology, speleology, tectonics, etc.

7. **Engineering, Electrical & Mechanical**: Computer engineering, controls, electrical engineering, mechanical engineering, robot mechanics, solar electric generation, thermodynamics, etc.

8. **Engineering, Energy & Transport**: Aerodynamics, aerospace and aeronautical engineering, alternative fuels, automotive & marine vehicle development, fossil fuel energy, heating & refrigeration, renewable energies, solar heating, wind energy, etc.

9. **Engineering, Materials & Bioengineering**: Acoustics, bioengineering, civil & construction engineering, chemical engineering, environmental engineering, ergonomics, industrial engineering & processing, material science, etc.

10. **Environmental Sciences & Management**: Air pollution and air quality, bioremediation (i.e., oil spill cleanup, etc.), ecology,

11. **Mathematical Sciences**: Science of numbers and their operations; algorithms, development of formal logical systems or various numerical and algebraic computations and the application of these principles; algebra, calculus, complex analysis, geometry, number theory, probability, statistics, etc.

12. **Medicine & Health Sciences**: Study of diseases and health of humans; allergies, cellular & molecular biology, dermatology, dentistry, epidemiology, genetics, immunology, nutrition, ophthalmology, pathology, pediatrics, pharmacology, physiology, sanitation, speech and hearing, etc.

13. **Microbiology**: Biology of microorganisms; antibiotics/microbials, bacterial genetics, bacteriology, fungi, molds, protozoology, virology, yeast, etc.

14. **Physics & Astronomy**: Theories, principles and laws governing energy and the effect of energy on matter; acoustics; atoms, molecules, nuclear, plasma, solids; biophysics; fluid and gas dynamics; instrumentation and electronics; magnetism; optics, lasers, masers; particle, quantum mechanics; semiconductors, solid state, superconductivity, thermodynamics; theoretical or computational astronomy, planetary science, etc.

15. **Plant Sciences**: Study of plant life; agriculture/agronomy, algae, circadian rhythms, ecology, forestry, horticulture, hydroponics, plant evolution, plant genetics, plant pathology, plant physiology, plant taxonomy, etc.

16. **Product Testing/Consumer Science (JUNIOR DIVISION ONLY)**: Quality control, comparison studies of product designs; using accepted scientific tests to obtain quantifiable results, etc.