

# NORTHERN OKLAHOMA COLLEGE

## INTERSCHOLASTIC CONTEST

### Examination Descriptions

#### **Accounting (Bookkeeping) #02**

The accounting exam will be objective in nature covering the basic concepts and principles of accounting, including accounting for both service enterprises and merchandise enterprises. Some of the specific topics include journal entries (including adjusting, closing, reversing), posting procedures, financial statements, and terminology. This examination consists of 50 multiple choice questions. Non-graphing calculators may be used.

#### **Agriculture #30**

This is a test for sophomores in agriculture. Various aspects of soil science, plant science, animal science (beef, swine, sheep, and horse), farm management and other relevant subject areas will be included. This examination consists of 50 multiple choice questions. Non-graphing calculators may be used.

#### **Agriculture II #33**

Designed for seniors studying agriculture, this test is a comprehensive examination of the students knowledge of fundamental and applied aspects of agriculture and agribusiness. Areas of animal science, plant science, soil science, and business will be covered. This examination consists of 50 multiple choice questions. Non-graphing calculators may be used.

#### **Algebra I #14**

This test could be considered a typical end-of-year exam for an Algebra I course. Appropriate weight is given both to fundamental concepts that are basic to traditional algebra instruction and to the newer approaches, language and content. Some of the specific topics included are operations with polynomials, equations (linear, quadratic, systems, etc.), inequalities, factoring, basic properties and principles of the real numbers, verbal problems, graphing and absolute value. This examination consists of 50 multiple choice questions. Non-graphing calculators may be used.

#### **Algebra II #15**

This test could be considered a typical end-of-year test for an Algebra I course. Some of the specific topics included are operations on polynomials, factoring, exponents, roots and radicals, solving equations (linear, quadratic, systems, etc.), absolute value, functions, logarithms, determinants, complex numbers and verbal problems. This examination consists of 50 multiple choice questions. Non-graphing calculators may be used.

#### **American History #25**

This exam will cover all periods and areas of American History. This examination consists of 50 true/false or multiple choice questions.

### **American National Government #35**

This test consists of an overview of the federal system of government in the United States. This examination consists of laws, the role of Congress and political parties. This examination consists of 50 true/false or multiple choice questions.

### **Art #01**

The test consists of visual analysis and multiple choice questions pertaining to the elements of art and principles of design.

### **Biology I #20**

These questions will cover all phases of general high school biology. Major areas emphasized in the contest examination will be as follows: protoplasmic organization; organic and inorganic compounds; general cellular structure; cellular metabolism; respiration and photosynthesis; basic Mendelian genetics; ecological concepts: food chains, energy flow and biomes; plant structure and diversity; animal structure and diversity; and basic human anatomy and physiology; major systems and organs. This examination consists of 50 multiple choice questions.

### **Chemistry I #19**

Students must be enrolled in Chemistry I not Chemistry II. Topics covered include: general introductory concepts, equations, mole concepts, balancing equations, stoichiometry, oxidation states, solutions and concentrations, nomenclature, gases, atomic structure through wave mechanical, bonding, rates of reaction, equilibrium, acid-base, and oxidation reduction. This is meant to give a good general idea of the areas covered on this exam. This examination consists of 50 multiple choice questions. Non-graphing calculators may be used.

### **Computer Science #03**

Areas emphasized in this examination will be as follows: the fundamental components and operational capabilities of a computer system; the principles of operation and methods of data storage of various hardware devices; the various categories of software; the general function of microcomputer productivity software tools; the principles and use of various program design techniques; and the terminology and concepts associated with programming languages. There will be no programming exercises. This examination consists of 50 multiple choice questions.

### **Economics #04**

The economics exam covers the basic concepts and principles of both microeconomics and macroeconomics. Some of the specific topics include economic markets, supply and demand, the Federal Reserve System, money and banking, and inflation. This examination consists of 50 multiple choice questions. Non-graphing calculators may be used.

### **English I #08**

This is an objective test in three areas: grammar and usage, interpretation of literary selections, and recognition of word meanings. This examination consists of 50 multiple choice questions.

**English II #09**

This is an objective test covering the following areas: composition, grammar and usage, diction, punctuation, and spelling. This examination consists of 50 multiple choice questions.

**English III #10**

This is an objective test covering the following areas: grammar and usage, reading comprehension (poetry and prose), recognition of kinds of sentences, and vocabulary. This examination consists of 50 multiple choice questions.

**English IV #11**

This is an objective test of covering three areas: grammar and usage, reading comprehension (poetry and prose), recognition of kinds of sentences, and vocabulary. This examination consists of 50 multiple choice questions.

**French I #12**

This is a written test that is designed to measure aural comprehension, reading comprehension, and understanding of grammatical concepts. It is objective in format, with a short dictation exercise to be used as a tiebreaker. Native speakers of French are ineligible.

**Math Analysis #16**

This test is designed to measure a student's mastery of pre-calculus mathematics. Topics are included from algebra (approximately 55% of the test), trigonometry (25%), and analytic geometry (20%). Some of the specific topics included are matrices, the binomial theorem, complex numbers, logarithms, exponentials, conic sections, trigonometric functions, trigonometric identities. This examination consists of 50 multiple choice questions. Non-graphing calculators may be used.

**Nutritional Science #28**

The FACS based nutritional science contest will cover foods, nutrition, and meal management. Topics include the basic food groups, nutritional terms, vitamins, minerals, proteins, carbohydrates and fats, cooking principles, the principles of table setting, and serving properly. This examination consists of 50 multiple choice questions.

**Oklahoma History #26**

The examination is quite thorough, and every effort is made to ensure a complete overview of Oklahoma History. Questions about the pre-history and early exploration of the region are included, but the test is mainly directed toward events, people, and conditions since the Louisiana Purchase. This examination consists of 50 multiple choice questions.

**Photography #36**

The test will attempt to cover all phases of basic photography based on adjustable 35mm camera practice. Major areas emphasized in the contest will be: basic exposure, which will include an understanding of the apertures and shutter speeds, light metering, and practical application; basic composition guidelines; basic light and lighting, which will include an elementary understanding of light theory and basic lighting equipment such as camera

mounted flash units; general photographic equipment, materials and processes, especially the black and white processes; and presentation of photographs. This examination consists of 50 true/false or multiple choice questions.

### **Physical Science #21**

The physical science test is based on textbooks used in area schools for the ninth grade level general physical science course. Questions are all made directly from these texts. Examples of subject matter on the test include the following: matter, density, mass and weight, heat and temperature, periodic tables, balancing equations, atomic structure, metric system, types of reactions, electricity and electrostatics, chemical and physical properties, light and sound waves, organic chemistry, ionization, oxidation states, radiation, work force, energy, acceleration, inertia, gases, and batteries. This is not meant to be a list of all subject matter but gives a good idea of the areas covered. This examination consists of 50 multiple choice questions. No calculators are necessary.

### **Physics #22**

The physics test will consist primarily of problems in five fundamental areas of physics: mechanics (kinematics, Newton's Laws, energy, momentum, conservation laws, etc.), wave motion, thermodynamics, electromagnetism (circuits, electric and magnetic fields, potential, etc.), and light and optics. Some knowledge of physical units, especially metric units, will be needed. The test will be multiple choice. Students will also be required to show mastery in problem solving. Numbers used will be such that no calculators will be needed, but non-graphing calculators are allowed. This examination consists of 50 multiple choice questions.

### **Plane Geometry #17**

This test could be considered a typical end-of-year exam for a plane geometry course. Some of the specific topics included are points, lines, rays, segments and planes, angles, triangles, quadrilaterals, other polygons, circles and spheres, parallels and perpendiculars, similarity, congruence, coordinate geometry, non-geometric deductive reasoning. Some of the process involved are informal drawings, verbal problem construction, and formal proof. This examination consists of 50 multiple choice questions. Non-graphing calculators may be used.

### **Presentation Tools (PowerPoint) #9**

The exam will consist of 50 multiple choice questions covering basic concepts of PowerPoint software and presentations.

### **Spanish I #13**

This is a written test that is designed to measure aural comprehension, reading comprehension, and understanding of grammatical concepts. It is objective in format. This examination consists of 50 multiple choice questions. Native speakers of Spanish are ineligible.

### **Spanish II #23**

This examination is designed to measure reading comprehension and understanding of grammatical concepts. This examination consists of 50 multiple choice questions. Native speakers of Spanish are ineligible.

**Spanish III #24**

This intermediate examination is designed to measure reading and understanding of grammatical and language comprehension. This examination consists of 50 multiple choice questions. Native speakers of Spanish are ineligible.

**Trigonometry #18**

This test could be considered a typical end-of-year exam for a trigonometry course. Some of the specific topics included are basic definitions, circular functions, basic identities, radian measure, graphs, and properties of the trigonometric functions. This examination consists of 50 multiple choice questions. Calculators may NOT be used except with instructor permission.

**Word Processing #07**

The exam will consist of 50 multiple choice questions covering basic concepts of word processing and Word software.

**World Geography #34**

The contest is designed for the student whose study of the world has given him/her an understanding of spatial, historical, regional, and economical geography. This examination consists of 50 true/false or multiple choice questions.

**World History #27**

The contest encompasses all areas of international history. This examination consists of 50 true/false or multiple-choice questions.