

AC 61-90

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OF
I
FUNDAMENTALS
INSTRUCTING

**Flight and Ground
Instructors**

Written Test Guide



U.S. DEPARTMENT OF TRANSPORTATION

FEDERAL AVIATION ADMINISTRATION

FUNDAMENTALS OF INSTRUCTING
FLIGHT AND GROUND INSTRUCTORS
WRITTEN TEST GUIDE

1979

U.S. Department of Transportation
Federal Aviation Administration
Flight Standards Service

PREFACE

This written test guide was developed by the Flight Standards Service of the Federal Aviation Administration to help applicants prepare for the written tests required for the Flight Instructor Certificate and the Ground Instructor Certificate.

Included is information on the requirements for certification and the type of subject matter covered on the official FAA written tests. Further, it provides the instructions for taking the written test, as well as test items representative of those contained in the Fundamentals of Instructing Tests. All items are based on the material in AC 60-14, Aviation Instructor's Handbook, which may be purchased from the U.S. Government Printing Office.

Comments regarding this publication should be directed to the U.S. Department of Transportation, Federal Aviation Administration, Flight Standards National Field Office, P.O. Box 25082, Oklahoma City, Oklahoma 73125.

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FLIGHT AND GROUND INSTRUCTORS

PILOT TRAINING

EFFECTIVE INSTRUCTION

The overall objective of any pilot training course is to qualify the student to be a competent, efficient, safe pilot for the operation of specific categories of aircraft under stipulated pilot privileges and limitations. The criteria by which we determine whether the training has been adequate are the passing of written and flight tests required by the Federal Aviation Regulations for the issuance of the various pilot certificates.

Generally, pilots learn by one of two methods. Some learn by rote (by memory alone without investigating fundamental principles), while others acquire knowledge and understanding of basic procedures and techniques and apply these concepts to the various pilot operations. The latter means of learning is by far the more effective method. Effective pilot training then, is based on the fact that knowledge and understanding of principles, along with skill, are essential to safety in flight. It has long been recognized that ground instruction and flight instruction go hand in hand. Each complements the other, resulting in a training program which is more meaningful and comprehensive.

THE ROLE OF THE INSTRUCTOR

The keystone of the present-day pilot training concept is the instructor--a professional who assumes full responsibility for all phases of a student pilot's required ground and flight training.

The instructor has always been considered an authority on aeronautical matters and is the expert to whom students, and many experienced pilots, submit questions concerning Federal Aviation Regulations, aeronautical technical matters, and current flight operating procedures and techniques. Obviously, to responsibly answer such questions or

resolve related problems, the instructor must have sound knowledge of the various aviation subjects.

Consequently, to provide instruction of professional quality, the instructor should thoroughly understand all aspects of the aeronautical subjects and their relationship to various pilot operations--not just be able to answer the random test items in the certification written test by rote. There can be no substitute for diligent study to attain the essential knowledge, for unremitting effort to develop competence, or for continuous review and practice to retain that knowledge and proficiency.

Even after the new instructor has gained the basic knowledge and skills and has been certificated, it is imperative that a continuous effort be made to improve the quality of instruction and to remain abreast of the latest developments in aviation products, regulations, procedures, and practices. To enhance professionalism in the field of pilot training, it is imperative for the instructor to maintain a current technical library to provide a ready source for reference and research. Education in general has three distinct purposes: the discovery of new knowledge, the dissemination of existing knowledge, and the translation of facts and knowledge into action on the part of the student. In this context the basic task of the pilot instructor is to help students accept this knowledge into their being so completely that all of the flying they may ever do is affected by these facts.

Armed with knowledge and skill, the professional instructor approaches student pilots with the responsibility to teach them to perform in an airplane according to the facts which are involved. However, if success as a professional instructor is to be achieved, the instructor must have a thorough understanding of how learning occurs and how to employ teaching methods that best foster learning. To teach effectively and produce competent, efficient, and safe pilots, the instructor should always practice professionalism in the teaching process.

How does one become a skilled and effective instructor? Although some people possess, to a greater degree than others, those traits that are desirable in an instructor, no one is born a natural instructor. Competent instructors become so through study, training, experience, and conscientious effort. Probably more than any other single factor, the instructor's own attitude toward instruction determines how well the job of teaching is done.

The eligibility, training, experience, and skill and knowledge requirements for FAA certification are established for flight instructors in Federal Aviation Regulations, Part 61, and for ground instructors in Part 143.

INSTRUCTOR CERTIFICATION WRITTEN TESTS

TYPE OF TESTS

To ensure that adequate knowledge has been acquired, Federal Aviation Regulations require that an applicant for a flight or ground instructor certificate pass certain written tests. One is on the fundamentals of instructing, while the other is on aeronautical subjects appropriate to the instructor rating sought.

The test on Fundamentals of Instructing (FOI) contains items involving subjects such as the learning process, elements of effective teaching, student evaluation, lesson planning, course development, and classroom instructing techniques. These subject areas are extensively discussed in AC 60-14, Aviation Instructor's Handbook (SN 050-011-00072-1), which may be purchased from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

The tests on aeronautical subjects deal with various topics such as basic navigation, radio navigation, radio communications, meteorology, aerodynamics, aircraft performance, Federal Aviation Regulations, and aircraft and powerplant operation. The written test evaluates the applicant for adequate knowledge and grasp of theory to assure that instruction in the specific subject will accomplish the goal of each lesson. Many questions require the ability to combine and interrelate knowledge in two or more specific subject areas.

All test items are the objective, multiple choice type, and can be answered by

the selection of a single response. This type of test conserves the applicant's time, permits greater coverage of subject matter, minimizes the time required for scoring, and eliminates subjective judgment in determining the applicant's grade.

Each item is independent of other test items; that is, a correct response to one test item does not depend upon, or influence, the correct response to another.

FUNDAMENTALS OF INSTRUCTING TEST

Communication between individuals through the use of words is a complicated process. Since certification tests involve the use of written rather than spoken words, communication between the test writers and the persons being tested may become a difficult matter if care is not exercised by both parties. Consequently, considerable effort is expended to write each test item in a clear, precise manner. Applicants should carefully read the information and instructions given with the tests, as well as the statements in each test item.

At the testing center, the applicant taking the Fundamentals of Instructing Test is issued a question book containing over two hundred questions, a sixty-item question selection sheet which indicates the specific questions to be answered, and an Airman Written Test Application (AC Form 8080-3) which contains the answer sheet.

To familiarize you with the procedures for taking the official FAA written test, samples of the general instructions, written test application, question selection sheet, and answer sheet are provided in this guide.

Also included in the guide are questions which are representative of those in the official FOI question book. They are all based on the material contained in Advisory Circular 60-14, Aviation Instructor's Handbook.

Always remember the following when taking the test:

1. Enter personal data in appropriate spaces on the test answer sheet in a complete and legible manner to aid in scoring. The test number is the number printed on the Question Selection Sheet, not the number printed on the question book.

2. Answer only the 60 questions whose numbers appear on your question selection sheet.
3. There are no "trick" questions. Each statement means exactly what it says. Do not look for hidden meanings. The statement does not concern exceptions to the rule; it refers to the general rule.
4. Carefully read the entire test item, statement, or question before selecting an answer. Skimming and hasty assumptions can lead to a completely erroneous interpretation of the problem because of failure to consider vital words. Examine and analyze the list of answers or phrases, then select the one that answers the question or completes the statement correctly.
5. Only one of the listed answers given is completely correct. The others may be the result of common misconceptions, or insufficient knowledge of the subject. Consequently, many of the incorrect answers may appear to be plausible to those persons whose knowledge is deficient. If the subject matter is adequately understood, the questions should not be difficult to answer correctly.
6. If considerable difficulty is experienced with a particular test item, do not spend too much time on it, but continue with other items which you consider to be less difficult. When all of the easier items are completed, go back and complete those items that were found to be more difficult. This procedure will enable you to use the available time to maximum advantage.

After completing the test, your answer sheet is forwarded to the Federal Aviation Administration Aeronautical Center in Oklahoma City, for scoring by electronic computers (ADP). Shortly thereafter, you will receive an Airman Written Test Report which not only includes the grade but also lists, in code, the subject areas in which test items were answered incorrectly. Those subject areas can be determined by reference to the List of Subject Matter Codes which accompanies the report. This method provides an essential feedback to you and can be effectively used for further study of the areas in which your knowledge was inadequate.

It must be emphasized here that the total number of subject codes shown on the test report is not necessarily an indication of the total number of test items answered incorrectly. When one or more questions are missed in a given subject area, the code for that subject appears only once on the grade report.

It is not necessary to take the Fundamentals of Instructing Test on the same day as the Flight Instructor or Ground Instructor Written Test, nor is it important which of these tests is taken first.

The FOI tests are common to both the flight instructor and ground instructor certificates. If the applicant already holds a valid FAA Flight or Ground Instructor Certificate and is applying for an instructor certificate other than that held, or for the addition of a rating to the certificate held, that person need not take the FOI test again.

After the prescribed written tests have been passed, the certification process requires the flight instructor applicants to pass a practical test in which competency to instruct students during flight must be demonstrated. This practical test must be satisfactorily completed within 24 months after the date the written tests were passed.

The written tests are administered by all FAA General Aviation District Offices (GADO), Flight Standards District Offices (FSDO), and some Air Carrier District Offices (ACDO), and Flight Service Stations (FSS). In addition, certain privately owned organizations have been designated as written test examiners to administer the FAA written tests. The practical test for prospective flight instructors can be administered by an FAA inspector or a designated flight instructor examiner (FIE).

RETESTING AFTER FAILURE

An applicant who fails the written test may not apply for retesting until 30 days after the date the applicant failed the test. In the case of the first failure, however, the person may apply for retesting before the 30 days have expired upon presenting a written statement from an authorized instructor certifying that appropriate ground instruction was given to the applicant and the instructor finds that person competent to pass the test. In addition, the written test report of the previously failed test must be presented at the time of retesting.

EXCERPTS OF FEDERAL AVIATION REGULATIONS

Part 61—Certification: Pilots and Flight Instructors

Subpart A—General

§ 61.1 Applicability.

(a) This Part prescribes the requirements for issuing pilot and flight instructor certificates and ratings, the conditions under which those certificates and ratings are necessary, and the privileges and limitations of those certificates and ratings.

* * * * *

§ 61.3 Requirements for certificates, rating, and authorizations.

* * * * *

(d) *Flight instructor certificate.* Except for lighter-than-air flight instruction in lighter-than-air aircraft, and for instruction in air transportation service given by the holder of an Airline Transport Pilot Certificate under § 61.169, no person other than the holder of a flight instructor certificate issued by the Administrator with an appropriate rating on that certificate may—

- (1) Give any of the flight instruction required to qualify for a solo flight, solo cross-country flight, or for the issue of a pilot or flight instructor certificate or rating;
- (2) Endorse a pilot logbook to show that he has given any flight instruction; or
- (3) Endorse a student pilot certificate or logbook for solo operating privileges.

* * * * *

§ 61.5 Certificates and ratings issued under this Part.

(a) The following certificates are issued under this Part:

- (1) Pilots certificates:
 - (i) Student pilot.
 - (ii) Private pilot.
 - (iii) Commercial pilot.
 - (iv) Airline transport pilot.
- (2) Flight instructor certificates.

* * * * *

(c) The following ratings are placed on flight instructor certificates where applicable:

- (1) Aircraft category ratings:
 - (i) Airplane.
 - (ii) Rotorcraft.
 - (iii) Glider.
- (2) Airplane class ratings:
 - [(i) Single-engine.
 - [(ii) Multiengine.]
- (3) Rotorcraft class ratings:
 - (i) Helicopter.
 - (ii) Gyroplane.
- (4) Instrument ratings:
 - (i) Instrument—airplane.
 - (ii) Instrument—helicopter.

* * * * *

§ 61.35 Written test: prerequisites and passing grades.

(a) An applicant for a written test must—

- (1) Show that he has satisfactorily completed the ground instruction or home study course required by this Part for the certificate or rating sought;
- (2) Present as personal identification an airman certificate, driver's license, or other official document; and
- (3) Present a birth certificate or other official document showing that he meets the age requirement prescribed in this Part for the certificate sought not later than 2 years from the date of application for the test.

(b) The minimum passing grade is specified by the Administrator on each written test sheet or booklet furnished to the applicant.

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EXCERPTS

Subpart G—Flight Instructors

§ 61.37 Written tests: cheating or other unauthorized conduct.

(a) Except as authorized by the Administrator, no person may—

(1) Copy, or intentionally remove, a written test under this Part;

(2) Give to another, or receive from another, any part of copy of that test;

(3) Give help on that test to, or receive help on that test from, any person during the period that test is being given;

(4) Take any part of that test in behalf of another person;

(5) Use any material or aid during the period that test is being given; or

(6) Intentionally cause, assist, or participate in any act prohibited by this paragraph.

(b) No person whom the Administrator finds to have committed an act prohibited by paragraph (a) of this section is eligible for any airman or ground instructor certificate or rating, or to take any test therefor, under this chapter for a period of one year after the date of that act. In addition, the commission of that act is a basis for suspending or revoking any airman or ground instructor certificate or rating held by that person.

§ 61.39 Prerequisites for flight tests.

(a) To be eligible for a flight test for a certificate, or an aircraft or instrument rating issued under this Part, the applicant must—

(1) Have passed any required written test since the beginning of the 24th month before the month in which he takes the flight test;

(2) Have the applicable instruction and aeronautical experience prescribed in this Part;

* * * * *

§ 61.181 Applicability.

This subpart prescribes the requirements for the issuance of flight instructor certificates and ratings, the conditions under which those certificates and ratings are necessary, and the limitations upon these certificates and ratings.

§ 61.183 Eligibility requirements: general.

To be eligible for a flight instructor certificate a person must—

(a) Be at least 18 years of age;

(b) Read, write, and converse fluently in English;

(c) Hold—

(1) A commercial or airline transport pilot certificate with an aircraft rating appropriate to the flight instructor rating sought, and

(2) An instrument rating, if the person is applying for an airplane or an instrument instructor rating;

(d) Pass a written test on the subjects in which ground instruction is required by § 61.185; and

(e) Pass an oral and flight test on those items in which instruction is required by § 61.187.

§ 61.185 Aeronautical knowledge.

(a) Present evidence showing that he has satisfactorily completed a course of instruction in at least the following subjects:

(1) The learning process.

(2) Elements of effective teaching.

(3) Student evaluation, quizzing, and testing.

(4) Course development.

(5) Lesson planning.

(6) Classroom instructing techniques.

(b) Have logged ground instruction from an authorized ground or flight instructor in all of the subjects in which ground instruction is required for a private and commercial pilot certificate, and for an instrument rating, if an airplane or instrument instructor rating is sought.

Part 143—Ground Instructors

EXCERPTS

§ 143.1 Applicability.

This Part prescribes the requirements for issuing ground instructor certificates and associated ratings and the general operating rules for the holders of those certificates and ratings.

§ 143.3 Application and issue.

(a) An application for a certificate and rating, or for an additional rating, under this Part, is made on a form and in a manner prescribed by the Administrator. However, a person whose ground instructor certificate has been revoked may not apply for a new certificate for a period of one year after the effective date of the revocation unless the order of revocation provides otherwise.

(b) An applicant who meets the requirements of this Part is entitled to an appropriate certificate with ratings naming the ground school subjects that he is authorized to teach.

(c) Unless authorized by the Administrator, a person whose ground instructor certificate is suspended may not apply for any rating to be added to that certificate during the period of suspension.

(d) Unless the order of revocation provides otherwise, a person whose ground instructor certificate is revoked may not apply for any ground instructor certificate for one year after the date of revocation.

* * * * *

§ 143.9 Eligibility requirements: general.

To be eligible for a certificate under this Part, a person must be at least 18 years of age, be of good moral character, and comply with § 143.11.

§ 143.11 Knowledge requirements.

Each applicant for a ground instructor certificate must show his practical and theoretical knowledge of the subject for which he seeks a rating by passing a written test on that subject.

* * * * *

§ 143.15 Tests: general procedures.

(a) Tests prescribed by or under this Part are given at times and places, and by persons, designated by the Administrator.

(b) The minimum passing grade for each test is 70 percent.

§ 143.17 Retesting after failure.

An applicant for a ground instructor rating who fails a test under this Part may apply for retesting—

(a) After 30 days after the date he failed that test; or

(b) Upon presenting a statement from a certificated ground instructor, rated for the subject of the test failed, certifying that he has given the applicant at least five hours additional instruction in that subject and now considers that he can pass the test.

* * * * *

WRITTEN TEST SUBJECT MATTER CODES

DEPARTMENT OF TRANSPORTATION
Federal Aviation Administration

FUNDAMENTALS OF INSTRUCTING

Written Test Subject Matter Codes

43

April 14, 1977

USE ONLY TO IDENTIFY CODES, not as study outline, since flight and ground instructor areas are combined. To determine the subject areas you missed, compare subject matter codes on your Airman Written Test Report with coded items on this list of subjects. The total number of questions you missed is NOT reflected by the number of subject matter codes shown on the test report, since ONE OR MORE questions may have been asked in each item shown.

THE LEARNING PROCESS

- A01 - Definition of learning
- A02 - Characteristics of learning
- A03 - Learning concepts and misconceptions
- A04 - How people learn
- A05 - Relationship of five senses to learning
- A06 - Laws of learning
- A07 - Perceptions and insight
- A08 - Goals and values
- A09 - Self concepts
- A10 - Tangible and intangible motivation
- A11 - Negative and positive motivations
- A12 - Rates of learning
- A13 - Levels of learning
- A14 - Advances and plateaus of learning
- A15 - Kinds of learning
- A16 - Trial and error learning
- A17 - Obstacles to learning
- A18 - Memory and forgetting
- A19 - Retention of learning
- A20 - Habits and transfer
- A21 - Role of the instructor

ELEMENTS OF EFFECTIVE TEACHING

- B01 - Control of human behavior
- B02 - Human needs
- B03 - Defense mechanisms
- B04 - Instructor's role
- B05 - Instructor-student relationship
- B06 - Instructor's attitude toward teaching
- B07 - Instructor effectiveness/student understanding
- B08 - Communication process
- B09 - Barriers to effective communication
- B10 - Gaining student's confidence
- B11 - Analyzing/accepting student as individual
- B12 - Slow, timid, and apt students
- B13 - Use of criticism and praise
- B14 - Keeping student informed of progress
- B15 - Devices, techniques to encourage learning
- B16 - Explanations and demonstrations
- B17 - Trial and practice
- B18 - Review and evaluation
- B19 - Using student's motivation
- B20 - Directness, clarity, simplicity in oral expressions
- B21 - Positive approach in teaching
- B22 - Repetitious drill and practice
- B23 - Providing for student participation
- B24 - Use of questions as teaching device
- B25 - Use of training aids
- B26 - "Building block" technique
- B27 - Selection of instruction methods
- B28 - Basic steps in teaching process
- B29 - Teaching from known to unknown
- B30 - Planning instructional activity
- B31 - Maintaining student interest
- B32 - Organizing material
- B33 - Lecture method
- B34 - Guided discussion method

- B35 - Demonstration-performance method

- B36 - Integrated flight instruction

- B37 - Helping the student learn

STUDENT EVALUATION, QUIZZING, TESTING

- C01 - Characteristics of evaluation
- C02 - Evaluating by rating
- C03 - Characteristics of effective critique
- C04 - Methods and purpose of critique
- C05 - Oral quizzes
- C06 - Types of questions to avoid
- C07 - Multiple-choice type tests
- C08 - True/False type tests
- C09 - Essay-type tests
- C10 - Completion-type tests
- C11 - Positive/negative discrimination
- C12 - Test comprehensiveness
- C13 - Test validity
- C14 - Test reliability
- C15 - Performance tests
- C16 - Use of pretest reviews
- C17 - Objective vs subjective tests
- C18 - Characteristics of a good test
- C19 - Assigning grades
- C20 - Administering tests

COURSE DEVELOPMENT

- D01 - Importance of planned syllabus
- D02 - Provision of flight syllabus
- D03 - Use of course syllabus
- D04 - Planning instructional activity

LESSON PLANNING

- E01 - Establishing lesson objectives
- E02 - Developing desired learning outcomes
- E03 - Researching the topics
- E04 - Organizing the material
- E05 - Selecting teaching methods
- E06 - Preparing the lesson plan
- E07 - Identifying blocks of learning
- E08 - Use of lesson plans

CLASSROOM INSTRUCTING TECHNIQUES

- F01 - Lecture method
- F02 - Guided discussion method
- F03 - Demonstration-discussion method
- F04 - Use of instructional aids
- F05 - Sources of ideas
- F06 - Types of instructional aids

SPECIFIC FLIGHT INSTRUCTOR RESPONSIBILITIES

- G01 - Sense of purpose
- G02 - Professional background
- G03 - Leadership responsibilities
- G04 - Self improvement
- G05 - Written and flight test recommendations
- G06 - Aircraft checkouts
- G07 - Refresher training
- G08 - Student pilot certificate endorsements
- G09 - Flight instructor image
- G10 - Standards of performance
- G11 - Supervision and surveillance

AIRMAN WRITTEN TEST APPLICATION

PRIVACY ACT STATEMENT

The information on this form is required under the authority of the Federal Aviation Act (Section 602). Certification cannot be completed unless the data is complete.

Disclosure of your Social Security Account Number (SSAN) is optional. If you do not supply your SSAN, a substitute number or identifier will be assigned to give your record a unique 9-digit number for internal control of airman records.

If your SSAN has been previously given, it is already in the system. Requests for removal must be in writing. If you do not wish your SSAN on future records, please do not disclose SSAN on airman written test, airman certification, and/or medical certification applications.

Routine uses of records maintained in the system, including categories of users and the purposes of such uses: To determine that airmen are certified in accordance with the provision of the Federal Aviation Act of 1958. Repository of documents used by individual and potential employers to determine validity of airmen qualifications. To support investigative efforts of investigation and law enforcement agencies of Federal, State, and local Governments. Supportative information in court case concerning individual status and/or qualifications in law suits. To provide data for the Comprehensive Airman Information System (CAIS). To provide documents for microfilm and microfiche backup records.

INSTRUCTIONS TO APPLICANT:

- * ATTENTION: READ THE FOLLOWING PARAGRAPH CAREFULLY BEFORE COMPLETING THIS APPLICATION:

WHOEVER, IN ANY MATTER WITHIN THE JURISDICTION OF ANY DEPARTMENT OR AGENCY OF THE UNITED STATES KNOWINGLY AND WILLFULLY FALSIFIES, CONCEALS OR COVERS UP BY ANY TRICK, SCHEME, OR DEVICE A MATERIAL FACT, OR MAKES ANY FALSE, FICTITIOUS OR FRAUDULENT STATEMENTS OR REPRESENTATIONS, OR MAKES OR USES ANY FALSE WRITING OR DOCUMENT KNOWING THE SAME TO CONTAIN ANY FALSE, FICTITIOUS OR FRAUDULENT STATEMENT OR ENTRY, SHALL BE FINED NOT MORE THAN \$10,000 OR IMPRISONED NOT MORE THAN 5 YEARS, OR BOTH (U.S. CODE, TITLE 18, SEC. 1001.)

- * CERTAIN TEST QUESTIONS INVOLVING REGULATIONS, ATC PROCEDURES, ETC., ARE FREQUENTLY OUTDATED BY VERY RECENT CHANGES. IN THESE INSTANCES, APPLICANTS ARE GIVEN CREDIT FOR THE QUESTION DURING THE PERIOD THAT IT TAKES TO DISTRIBUTE A REVISED QUESTION.
- * DO NOT TEAR SHEETS APART.
- * TURN TO PAGE 4 AND COMPLETE THE PERSONAL DATA SECTION. BE SURE THAT YOUR SIGNATURE IS ON THE PROPER LINE. BEFORE COMMENCING TEST. READ INSTRUCTIONS FOR MARKING THE ANSWER SHEET.

INSTRUCTIONS TO FAA PERSONNEL:

- * REFER TO PAGE 3 OF THE APPLICATION FOR COMPLETION OF THE TIME WAIVER AND SECTION WAIVER BLOCK WHEN REQUIRED.

0809035		DEPARTMENT OF TRANSPORTATION — FEDERAL AVIATION ADMINISTRATION	
		AIRMAN WRITTEN TEST APPLICATION	
DATE OF TEST MONTH DAY YEAR		TITLE OF TEST	
		TEST NO.	
PLEASE PRINT ONE LETTER IN EACH SPACE — LEAVE A BLANK SPACE AFTER EACH NAME			
NAME (LAST, FIRST, MIDDLE)		DATE OF BIRTH MONTH DAY YEAR	
MAILING ADDRESS NO. AND STREET, APT #, P.O. BOX, OR RURAL ROUTE		DESCRIPTION HEIGHT WEIGHT HAIR EYES	
CITY, TOWN OR POST OFFICE AND STATE		ZIP CODE	
BIRTHPLACE (City and State, or foreign country)		CITIZENSHIP	
SOCIAL SECURITY NO.		IF A SOCIAL SECURITY NUMBER HAS NEVER BEEN ISSUED CHECK THIS BLOCK <input type="checkbox"/>	
Is this a retest? <input type="checkbox"/> No <input type="checkbox"/> Yes, date of last test		Have you taken or are you taking an FAA approved course for this test? <input type="checkbox"/> No <input type="checkbox"/> Yes (If "yes" give details below)	
Graduation date		NAME OF SCHOOL	
		CITY AND STATE	
CERTIFICATION: I CERTIFY that all of the statements made in this application are true, complete, and correct to the best of my knowledge and belief and are made in good faith. Signature _____			
— DO NOT WRITE IN THIS BLOCK — FOR USE OF FAA OFFICE ONLY —			
CARD A		CARD B	
CATEGORY	TEST NUMBER	TAKE NO.	SECTIONS
			1 2 3 4 5 6 7
			MONTH DAY YEAR
			EXPIRATION
			CERTIFICATED SCHOOL NUMBER
			MECH EXP. DATE BY SECTION
			1 2 3
			ID
			Applicant's identity established by
			FIELD OFFICE DESIGNATION
			SIGNATURE of FAA Representative
INSTRUCTIONS FOR MARKING THE ANSWER SHEET. Completely darken only one circle for each question. DO NOT USE (X) OR (✓). Use black lead pencil furnished by examiner. To make corrections, open answer sheet so erasure marks will not show on page 2. Then erase incorrect response on page 4. On page 2 (copy) mark the incorrect response with a slash (/). Questions are arranged in VERTICAL sequence as indicated by the arrows			

1	23	45	67	89	111	133
2	24	46	68	90	112	134
3	25	47	69	91	113	135
4	26	48	70	92	114	136
5	27	49	71	93	115	137
6	28	50	72	94	116	138
7	29	51	73	95	117	139
8	30	52	74	96	118	140
9	31	53	75	97	119	141
10	32	54	76	98	120	142
11	33	55	77	99	121	143
12	34	56	78	100	122	144
13	35	57	79	101	123	145
14	36	58	80	102	124	146
15	37	59	81	103	125	147
16	38	60	82	104	126	148
17	39	61	83	105	127	149
18	40	62	84	106	128	150
19	41	63	85	107	129	
20	42	64	86	108	130	
21	43	65	87	109	131	
22	44	66	88	110	132	

Sample

QUESTION SELECTION SHEET

* USE WITH QUESTION BOOK FOI-1 ONLY!

FOI-1A



TITLE FUNDAMENTALS OF INSTRUCTING	TEST NO. 701001
--	----------------------------------

NAME _____

NOTE: IT IS PERMISSIBLE TO MARK ON THIS SHEET

SAMPLE

On Answer Sheet For Item No.	Answer Question Number	On Answer Sheet For Item No.	Answer Question Number	On Answer Sheet For Item No.	Answer Question Number
1 . . .	101	21 . . .	152	41 . . .	235
2 . . .	103	22 . . .	155	42 . . .	238
3 . . .	106	23 . . .	158	43 . . .	242
4 . . .	109	24 . . .	160	44 . . .	247
5 . . .	114	25 . . .	165	45 . . .	250
6 . . .	116	26 . . .	170	46 . . .	259
7 . . .	118	27 . . .	172	47 . . .	261
8 . . .	120	28 . . .	175	48 . . .	262
9 . . .	121	29 . . .	178	49 . . .	265
10 . . .	126	30 . . .	180	50 . . .	268
11 . . .	129	31 . . .	185	51 . . .	272
12 . . .	132	32 . . .	190	52 . . .	275
13 . . .	134	33 . . .	194	53 . . .	278
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FOR OFFICIAL USE ONLY

MAXIMUM TIME ALLOWED FOR TEST: FIVE HOURS

GENERAL INSTRUCTIONS

READ CAREFULLY

1. This book contains 200 questions beginning with number 101. You are required to answer 60 QUESTIONS ONLY.
2. Refer to the QUESTION SELECTION SHEET to determine which 60 questions you are to answer.
3. Mark your answers in the appropriate places on the ANSWER SHEET.
4. Read each question carefully and select the best answer. Always answer questions in terms of current regulations, procedures, or techniques.
5. The MINIMUM passing grade is 70 percent.

SAMPLE

WRITTEN TEST GUIDE
FUNDAMENTALS OF INSTRUCTING

ANSWER ONLY THE 60 QUESTIONS
WHOSE NUMBERS APPEAR ON YOUR
QUESTION SELECTION SHEET.

001. The largest percentage of a normal person's knowledge is acquired through which of these senses?
- A05 1- Sight.
 2- Smell and taste.
 3- Touch.
 4- Hearing.
002. Which of these learning experiences would be the most effective in the learning process?
- A03 1- Those which present a minimum challenge to the student.
 2- Experiences which involve the student's feelings, thoughts, and memories of past experiences.
 3- Experiences which are totally new and unrelated to the learner's previous experiences.
 4- Those in which the student need only commit something to memory.
003. A student's readiness to learn and understanding of the requirements involved in the learning situation are affected most by
- A02 1- the student's intellectual level.
 2- the student's past experiences.
 3- the degree of difficulty involved in learning.
 4- the goals and incentives of other students in the class.
004. Learning is strengthened when accompanied by a pleasant or satisfying feeling. This principle is the
- A06 1- law of intensity.
 2- law of recency.
 3- law of effect.
 4- law of primacy.
005. Which law of learning implies that a student will learn more from the real thing than from a substitute?
- A06 1- Law of effect.
 2- Law of recency.
 3- Law of intensity.
 4- Law of primacy.
006. Things most often repeated are best remembered because of which law of learning?
- A06 1- Law of exercise.
 2- Law of intensity.
 3- Law of primacy.
 4- Law of recency.
007. Which law of learning is recognized when an instructor carefully plans a summary for a ground school lesson or a post-flight critique?
- A06 1- Law of intensity.
 2- Law of recency.
 3- Law of effect.
 4- Law of exercise.
008. If a student has a strong purpose, a clear objective, and a well-fixed reason for learning something, it is the result of the law of
- A06 1- readiness.
 2- effect.
 3- intensity.
 4- primacy.

Samples

009. Which law of learning states that learning is weakened when associated with an unpleasant feeling?

- A06
- 1- Law of readiness.
 - 2- Law of primacy.
 - 3- Law of intensity.
 - 4- Law of effect.

010. If students lack motivation, their progress will be less than if which law of learning prevails?

- A06
- 1- Law of primacy.
 - 2- Law of exercise.
 - 3- Law of effect.
 - 4- Law of readiness.

011. Teaching the student to perform a task right the first time is an example of the

- A06
- 1- law of readiness.
 - 2- law of recency.
 - 3- law of effect.
 - 4- law of primacy.

012. The law of exercise is the basis of

- A06
- 1- learning by rote.
 - 2- the emotional reaction of the learner.
 - 3- learning to do things right the first time.
 - 4- practice and drill.

013. A basic need that affects all of a person's perceptions is the need to

- A07
- 1- avoid areas of any threat to success.
 - 2- accomplish a higher level of learning.
 - 3- maintain and enhance the person's own organized self.
 - 4- acquire a formal education.

014. What is the basis of all learning?

- A07
- 1- Motivation.
 - 2- Perception.
 - 3- Positive self-concept.
 - 4- Insight.

015. Instruction, as opposed to the "trial and error" method of learning, is desirable because competent instruction speeds the learning process by

- A07
- 1- teaching the relationship of perceptions as they occur.
 - 2- relieving the student of the task of self-evaluation.
 - 3- eliminating the practice of exploring and experimenting.
 - 4- emphasizing only the important points of training.

016. Which statement is true about the perceptual process?

- A07
- 1- Negative self-concepts have little or no effect on the perceptual process.
 - 2- An individual's beliefs and value structures have no effect on perceptions.
 - 3- All perceptions are affected by the need to preserve and perpetuate one's self.
 - 4- Fear favorably affects perceptions by widening a person's perceptual field.

017. "Insights," as applied to learning, involve a person's

- A07
- 1- awareness of those processes which are not immediately apparent.
 - 2- grouping of associated perceptions into meaningful wholes.
 - 3- ability to recognize the reason for learning a procedure.
 - 4- self-concept or self-image.

018. Perceptions result when a person

- A07
- 1- responds to visual cues first, then aural cues, and relates these cues to ones previously learned.
 - 2- groups together bits of information.
 - 3- gives meaning to sensations being experienced.
 - 4- responds correctly to self-evaluation.

019. In the learning process, fear or the element of threat will
- A07
- 1- accelerate the attainment of perceptions.
 - 2- improve the student's ability to cope with the learning situation.
 - 3- narrow the student's perceptual field.
 - 4- intensify the student's desire to improve performance.
020. Evoking student insights is one of the instructor's major responsibilities. This involves
- A07
- 1- the grouping of perceptions into meaningful wholes.
 - 2- a student's immediate grasp of theoretical principles as they are taught in ground school.
 - 3- the analysis of a student by the instructor.
 - 4- the ability of a student to master the rote performance of a task that has been learned.
021. To predict how the student will interpret training experiences and instructions, the instructor must have knowledge of the student's
- A08
- 1- intelligence and previous educational accomplishments.
 - 2- readiness to learn.
 - 3- basic need to maintain and enhance one's organized self.
 - 4- precise kinds of commitments and philosophical outlooks.
022. To enhance the instructor's relationship with students, an instructor should be aware that students have
- A08
- 1- a tendency to shirk responsibility, because people are inherently lazy.
 - 2- relinquished their role as individuals while enrolled in training programs.
 - 3- drives and desires that they continually try to satisfy in one way or the other.
 - 4- feelings of insecurity when receiving criticism, whether constructive or not.
023. Select the true statement concerning negative self-concepts.
- A09
- 1- Negative self-concepts should be considered an asset to learning because they favorably affect the "ability to do."
 - 2- Negative self-concepts may be used to the advantage of an instructor who has a good understanding of psychology.
 - 3- Negative self-concepts may inhibit the ability of the student to properly implement that which is perceived.
 - 4- Negative self-concepts may be helpful because positive experiences often tend to contradict or destroy the self-concept.
024. The student who has negative experiences which tend to contradict self-concepts is probably one who
- A09
- 1- compensates for a personality conflict with the instructor.
 - 2- attempts to suppress aggressive reactions.
 - 3- will tend to reject instruction.
 - 4- is psychologically motivated for further training.
025. An instructor may foster the development of insights by
- A09
- 1- introducing the student to at least two new tasks during each lesson.
 - 2- always keeping the rate of learning consistent so that it is predictable.
 - 3- pointing out the attractive features of the activity to be learned.
 - 4- helping the student acquire and maintain a favorable self-concept.
026. The factor which contributes most to a student's failure to remain receptive to new experiences or which creates a tendency to reject additional training, is the student's
- A09
- 1- physical organism.
 - 2- goals and values.
 - 3- basic needs.
 - 4- negative self-concept.

027. Select the correct statement pertaining to motivation.
- A10 1- The desire for personal gain is a form of negative motivation.
 2- Slumps in learning are often due to slumps in motivation.
 3- Motivation has little to do with learning.
 4- Negative motivations are as effective in promoting efficient learning as are positive motivations.
028. Which of these is a form of negative motivation?
- A11 1- Reproof and threats.
 2- The promise or achievement of rewards.
 3- The belief that success is possible under certain circumstances.
 4- Realizing that certain actions and operations may prevent injury or loss of life.
029. Which of the following is generally the more effective way for the instructor to properly motivate students?
- A11 1- Reinforce their self-confidence by requiring no tasks beyond their ability to perform.
 2- Appeal to their pride and self-esteem.
 3- Provide positive motivations by the promise or achievement of rewards.
 4- Maintain pleasant personal relationships with students, even though it may be necessary to lower standards at times.
030. Which of these may produce fears and be accepted by the student as threats?
- A11 1- Negative motivations.
 2- Positive motivations.
 3- Intangible motivations.
 4- Tangible motivations.
031. Motivations in the form of reproof and threats should be avoided with all but the student who is
- A11 1- slow or discouraged.
 2- bored or disinterested.
 3- overconfident and impulsive.
 4- timid and shy.
032. Which statement is true concerning motivations?
- A11 1- Negative motivations characteristically are as effective as positive motivations.
 2- Motivations may be very subtle and difficult to identify.
 3- There is little or no motivation in menial tasks such as digging a ditch.
 4- Motivations must be tangible to be effective.
033. What effect does making each lesson a pleasurable experience have on the student?
- A11 1- Fosters complacency.
 2- Maintains a high level of motivation.
 3- Tends to lower standards of performance.
 4- Develops undesirable habit patterns.
034. To promote efficient learning, the instructor should use
- A11 1- positive and negative motivators as equally as possible.
 2- positive motivators rather than negative motivators.
 3- negative motivators more often than positive motivators.
 4- only negative motivators.
035. The dominant force which governs the student's progress and ability to learn is
- A11 1- physical organism.
 2- insight.
 3- perception.
 4- motivation.
036. An instructor can most effectively maintain a high level of student motivation by
- A11 1- setting performance standards to match the student's ability.
 2- making things easy for the student.
 3- making each lesson a pleasant experience for the student.
 4- conducting lessons which offer no rewards.

037. The highest level of learning has been achieved when a person is able to
- A13 1- accomplish or perform each element of a procedure precisely.
2- accurately repeat verbally what has been learned.
3- understand each segment of a particular subject, procedure, or technique.
4- correlate an element which has been learned with other segments or blocks of learning or accomplishments.
038. A person who has learned by rote is one who
- A13 1- can repeat back something which has been taught, without being able to understand what has been learned.
2- understands what has been taught.
3- has achieved the skill to apply what has been taught.
4- is able to associate an element which has been learned with other segments of learning.
039. The lowest level of learning has been attained when the student
- A13 1- can repeat back something without understanding what has been learned.
2- understands what has been taught.
3- can apply what has been taught.
4- can associate an element which has been learned with other segments of learning.
040. A leveling-off process or "learning plateau" in a student's progress is considered
- A14 1- normal and should be expected after an initial period of rapid improvement.
2- abnormal since it means that learning has ceased.
3- abnormal and should not be brought to the student's attention.
4- normal if it does not stay level for significant periods of effort.
041. On a graph showing the typical progress in learning, the initial leveling off of the learning curve is called a
- A14 1- learning plateau.
2- progress reversal.
3- learning gradient.
4- progress advance.
042. Which of these would be most profitable to a beginning student?
- A16 1- Assignment of a grade on performance.
2- Evaluation of performance against a set standard.
3- Early evaluation to predict eventual proficiency.
4- Constructive critique to help eliminate errors.
043. Which of the following would most likely be an indication that a student is reacting abnormally to stress?
- A17 1- Automatic response to a given situation.
2- Extreme overcooperation.
3- Slow progress.
4- Hesitancy to act.
044. The instructor can counteract anxiety in a student by
- A17 1- ignoring the student's fears.
2- treating the student's fears as a normal reaction.
3- continuously citing the unhappy consequences of faulty performance.
4- discontinuing instruction in the tasks that cause anxiety.
045. One of the surest ways to lose the student's confidence and attention is for the instructor to
- A17 1- admit not knowing the answer to the student's question.
2- create the impression of "talking down" to the student.
3- acknowledge that both the student and instructor are important to each other.
4- refer to a checklist before takeoff or a lesson plan during ground training.
046. Which of the following would most likely be an indication that a student is reacting abnormally to stress?
- A17 1- Inappropriate laughter or singing.
2- Rapid thinking and reaction.
3- Automatic response to a given situation.
4- Slow changes in emotions.

047. What technique can the instructor use to delay the onset of fatigue during flight training?

- A17
- 1- Introducing a number of different maneuvers involving different elements and objectives.
 - 2- Increasing the complexity of maneuvers.
 - 3- Lengthening the instruction periods.
 - 4- Increasing the frequency of instruction periods.

048. Which of the following is the most accurate statement concerning student fatigue during pilot training?

- A17
- 1- Fatigue will be more pronounced when a number of tasks involving different elements and objectives are introduced.
 - 2- Fatigue is the primary consideration in determining the length and frequency of instruction periods.
 - 3- Fatigue is induced solely because of tenseness and can be minimized by a review of tasks already learned.
 - 4- Fatigue is a factor which depends more on mental alertness than on physical condition.

049. When under stress normal individuals usually react

- A17
- 1- by responding rapidly and exactly, often automatically, within the limits of their experience and training.
 - 2- inappropriately such as extreme overcooperation, painstaking self control, and inappropriate laughing or singing.
 - 3- with very rapid changes in emotions, severe anger at the instructor, or others.
 - 4- with marked changes in mood on different lessons such as excellent morale followed by deep depression.

050. Which of the following would lead to lack of student confidence in the instructor?

- A17
- 1- Too much help and encouragement given by the instructor to the slow student.
 - 2- Unplanned periods of instruction or poor preparation.
 - 3- A situation in which quick or brisk instruction is given.
 - 4- An examination given on the first day of class.

051. To deal with the problem of student airsickness, the instructor should be aware that it is

- A17
- 1- confined to the emotionally unstable student and indicates a weakness that will exist throughout that person's career.
 - 2- a motion sickness to which resistance or immunity can be developed if the flight is terminated as soon as incipient sickness is experienced.
 - 3- a reaction to fear and apprehension that is only exhibited by the timid student.
 - 4- due to a lack of confidence on the student's part.

052. Students who grow impatient when learning the basic elements of a task are those who

- A17
- 1- should have the preliminary training presented one step at a time with clearly stated goals for each step.
 - 2- are less easily discouraged than the unaggressive students.
 - 3- possess superior motivation.
 - 4- should not be held back by insisting that the immediate goal be reached before they progress to the next step in training.

053. Instruction that is keyed to the pace of a slow learner, but is applied to an apt student, will most likely result in

- A17
- 1- anxiety.
 - 2- confusion.
 - 3- impatience.
 - 4- a feeling of unfair evaluations.

054. According to one theory, some forgetting is due to the practice of submerging an unpleasant experience into the subconscious. This is called

- A17
- 1- repression.
 - 2- disuse.
 - 3- interference.
 - 4- blanking.

055. Concerning the factors involved in remembering, which statement is true?

- A18
- 1- Negativism promotes remembering.
 - 2- Repetition guarantees remembering.
 - 3- Practice guarantees remembering.
 - 4- Praise stimulates remembering.

056. One theory about forgetting is that an item is forgotten because a later experience has overshadowed it. This process is called

- A18
- 1- repression.
 - 2- disuse.
 - 3- interference.
 - 4- blanking.

057. Which of these best ensures recall of material on tasks that have been taught?

- A19
- 1- Practice of mere repetition.
 - 2- Rote learning.
 - 3- Meaningful teaching.
 - 4- Negative motivations.

058. Things learned previously by the student may either help or hinder the current learning task. This process generally is called

- A20
- 1- insight.
 - 2- interference.
 - 3- transfer of learning.
 - 4- correlation.

059. Which statement is true about transfer of learning?

- A20
- 1- Positive transfer occurs if the learning of one skill interferes with retention or proficiency of another skill.
 - 2- Negative transfer occurs when students interpret new things in terms of what they already know.
 - 3- Positive transfer occurs when the learning of one skill helps the student learn another skill.
 - 4- Negative transfer occurs when the process refutes the interference theory of forgetting.

060. To ensure further learning and correct student performance after the completion of training, it is the instructor's responsibility to

- A20
- 1- allow incorrect performance at the beginning of training to "get those errors out of the student's system."
 - 2- proceed to the next learning task even though the more simple tasks are performed incorrectly.
 - 3- accept improper habits during the early phase of training and correct these faults later.
 - 4- insist on correct techniques and procedures from the outset of training.

061. To help the student achieve transfer of learning, the instructor should

- A20
- 1- make certain the student understands that what is learned can be applied to other situations.
 - 2- encourage rote learning.
 - 3- discourage the use of imagination and ingenuity in applying knowledge and skills.
 - 4- use instructional materials that precludes the formation of well founded concepts and generalizations.

062. Which generalization about motivated human nature has been made by noted psychologists?

- 801
- 1- A human being will not exercise self-direction and self-control in the pursuit of committed goals.
 - 2- The average human being does not inherently dislike work.
 - 3- It is human nature to shirk responsibility.
 - 4- The capacity to exercise a relatively high degree of imagination, ingenuity, and creativity in solving common problems is rare in the human race.

063. Before a student can concentrate on learning, which of the human needs must be satisfied?

- 802
- 1- Self-fulfillment needs.
 - 2- Safety needs.
 - 3- Social needs.
 - 4- Physical needs.

064. Which of the student's human needs offers the greatest challenge to the instructor?

- 802
- 1- Self-fulfillment needs.
 - 2- Physical needs.
 - 3- Safety needs.
 - 4- Social needs.

065. Among the various human needs, which of these is the individual first concerned with?

- 802
- 1- Personal safety.
 - 2- Social needs.
 - 3- Self-fulfillment.
 - 4- Physical needs.

066. After individuals are physically comfortable and have no fear for their safety, what then becomes the prime influence on their behavior?

- B02
- 1- Social needs.
 - 2- Egoistic needs.
 - 3- Materialistic needs.
 - 4- Physical needs.

067. When a student becomes bewildered and lost in the advanced phase of training after completing the early phase without grasping the fundamentals, the defense mechanism is usually in the form of

- B03
- 1- rationalization.
 - 2- aggression.
 - 3- flight.
 - 4- resignation.

068. When students display the defense mechanism called aggression, they

- B03
- 1- attempt to justify actions that otherwise would be unacceptable.
 - 2- may refuse to participate in the activities of the class.
 - 3- develop symptoms or ailments that give them satisfactory excuses for removing themselves from frustration.
 - 4- become so frustrated they lose interest and give up.

069. When students subconsciously use the defense mechanism called rationalization, they

- B03
- 1- develop symptoms that give them excuses for removing themselves from frustration.
 - 2- cannot accept the real reasons for their behavior.
 - 3- become aggressive against something or somebody.
 - 4- no longer believe it profitable or even possible to work further.

070. When students become so frustrated they no longer believe it profitable or even possible to work further, they usually display which defense mechanism?

- B03
- 1- Resignation.
 - 2- Aggression.
 - 3- Flight.
 - 4- Rationalization.

071. Taking physical or mental flight is a defense mechanism that students use when they

- B03
- 1- want to escape from frustrating situations.
 - 2- cannot accept the real reasons for their behavior.
 - 3- become bewildered and lost in the advanced phase of training.
 - 4- attempt to justify actions that otherwise would be unacceptable.

072. Although defense mechanisms can serve a useful purpose, they also can be hindrances because they

- B03
- 1- destroy feelings of failure.
 - 2- alleviate the causes of problems.
 - 3- provide feelings of adequacy.
 - 4- involve self-deception and distortion of reality.

073. When a student uses excuses to justify inadequate performance, it is an indication of the defense mechanism known as

- B03
- 1- flight.
 - 2- rationalization.
 - 3- aggression.
 - 4- resignation.

074. When a student asks irrelevant questions or refuses to participate in class activities, it usually is an indication of the defense mechanism known as

- B03
- 1- flight.
 - 2- rationalization.
 - 3- aggression.
 - 4- resignation.

075. When a student engages in daydreaming, it is the defense mechanism of

- B03
- 1- flight (escape).
 - 2- rationalization.
 - 3- aggression.
 - 4- resignation.

076. Which statement is true regarding true professionalism as an instructor?

- B04
- 1- To achieve professionalism, actions and decisions must be limited to standard patterns and practices.
 - 2- Anything less than sincere performance destroys the effectiveness of the professional instructor.
 - 3- Professionalism is not necessarily based on intelligence or the ability to reason logically and accurately.
 - 4- A single definition of professionalism would encompass all of the qualifications and considerations which must be present.

077. Student confidence tends to be destroyed if instructors

- B05
- 1- identify the student's errors and failures.
 - 2- bluff whenever in doubt about some point.
 - 3- acknowledge their own mistakes.
 - 4- direct and control the student's actions and behavior.

078. The professional relationship between the instructor and the student should be based upon

- B05
- 1- the mutual acknowledgement that they are important to each other and both are working toward the same objective.
 - 2- the concept that making things easy for the student and accepting lower standards will improve the relationship.
 - 3- the need to disregard the student's personal faults, interests, or problems.
 - 4- the understanding that during the training course the instructor's objectives are different from the student's.

079. Which of these would more likely result in students becoming frustrated?

- B05
- 1- Telling the students that their work is unsatisfactory with no explanation.
 - 2- Neglecting to tell students what is expected of them and what they can expect.
 - 3- Failing to point out to students how a particular lesson or course can help them reach an important goal.
 - 4- Covering up instructor mistakes or bluffing when the instructor is in doubt.

080. In the communication process the communicator will be more successful in gaining and retaining the receiver's attention by

- B08
- 1- varying the communicative approach.
 - 2- providing an atmosphere which discourages questioning.
 - 3- presenting the message in a manner that is totally foreign to the receiver's experiences.
 - 4- relying on technical language to express ideas to the receiver.

081. Which statement is true regarding effective communication during student instruction?

- B08
- 1- Effective communication has taken place when information is provided in such a way that it changes the behavior of the student.
 - 2- Effective communication has taken place when the student is able to repeat the information that has been received.
 - 3- Effective communication is when the student has accurately received the information even though the factors and principles are not yet understood.
 - 4- Effective communication at its best is when information is accurately transmitted and received.

082. To communicate effectively, instructors must

- B08
- 1- depend on a highly technical or professional background to ensure acceptance of the message.
 - 2- reveal a positive and confident attitude while delivering their message.
 - 3- rely on technical language to express ideas clearly to students.
 - 4- limit the method of communication to one channel (hearing, seeing, or feeling) to avoid confusion.

083. In the communication process, if a listener has difficulty in understanding the symbols the speaker is using, and indicates confusion, the speaker

- B08
- 1- is encouraged and force is added to communication.
 - 2- should avoid the use of concrete words.
 - 3- should resort to the use of abstract words.
 - 4- may become puzzled and uncertain.

084. In the communication process, a speaker is encouraged and force is added to communication when the listener

- B08
- 1- has difficulty in understanding and indicates confusion.
 - 2- reacts favorably.
 - 3- shows an attitude of passive neutrality.
 - 4- has no experiences in common with the speaker.

085. Effective communication has taken place when, and only when, the

- B08
- 1- sender uses a vocabulary (written or oral) that is meaningful to the reader or listener.
 - 2- communicator has convinced the listener there is a need to know the ideas presented.
 - 3- receiver has the ability to question and comprehend the ideas that have been transmitted.
 - 4- receivers react with understanding and change their behavior accordingly.

086. The effectiveness of communication between the instructor and the student is measured by the

- B08
- 1- facial expressions of the student during a lesson.
 - 2- similarity between the idea transmitted and the idea received.
 - 3- degree of attention the student gives to the instructor during a lesson.
 - 4- level of motivation displayed by the student.

087. Probably the greatest single barrier to effective communication in the teaching process is a lack of

- B09
- 1- personality harmony between instructor and student.
 - 2- quiet environment.
 - 3- time available for communication.
 - 4- a common experience level between the instructor and student.

088. By the use of abstractions in the communication process, the communicator will

- B09
- 1- narrow and gain better control of the image produced in the minds of listeners and readers.
 - 2- not evoke in the listener's or reader's mind the specific items of experience the communicator intends.
 - 3- be using words which refer to objects or ideas that human beings can experience directly.
 - 4- bring forth specific items of experience in the minds of the receivers.

089. Probably the greatest single barrier to effective communication is the

- B09
- 1- confusion between the symbol and the thing symbolized.
 - 2- making of statements which contain inaccuracies.
 - 3- use of abstractions by the communicator.
 - 4- lack of a common core of experience between communicator and receiver.

090. A communicator's words cannot communicate the desired meaning to another person unless the

- B09
- 1- listener or reader has had some experience with the objects or concepts to which these words refer.
 - 2- words give the meaning that is in the mind of the receiver.
 - 3- communicator makes extensive use of abstractions.
 - 4- communicator avoids the use of words which relate to the receiver's past experience.

091. The danger in using abstract words is that they

- B09
- 1- will not evoke the specific items of experience in the listener's mind that the communicator intends.
 - 2- control the image produced in the listener's mind.
 - 3- refer only to things that people are familiar with or can relate to.
 - 4- are overly concise in their meanings.

092. Instructors who limit their thinking to the whole group without considering the individuals within that group are

- B11
- 1- using a good lecture technique.
 - 2- assuming all students have an average personality which really fits no one.
 - 3- presenting information efficiently for maximum retention.
 - 4- using an excellent time-saving measure.

093. Which of the following is one of the ways in which anxiety or apprehension will affect a student?

- B12
- 1- Anxiety tends to increase mental acuity and perceptiveness, but interferes with muscular coordination.
 - 2- Anxiety causes dispersal of the student's attention over such a wide range of matters as to interfere with normal reactions.
 - 3- Anxiety will speed up the learning process for the student if properly controlled and directed by the instructor.
 - 4- Anxiety may limit the student's ability to learn from perceptions.

094. Faulty performance due to student overconfidence should be corrected by

- B12
- 1- requiring the student to perform unpleasant tasks.
 - 2- raising the standard of performance for each lesson.
 - 3- withholding the evaluation of the student's progress.
 - 4- praising the student only when it is deserved.

095. Ridicule and reproof of a slow and apprehensive student are

- B12
- 1- effective if the student understands the reason for being criticized in this manner.
 - 2- ineffective in encouraging learning.
 - 3- generally an effective psychological tool because students will work to avoid unpleasant experiences.
 - 4- effective because students learn best when mistakes are pointed out in a forceful manner.

096. When a student correctly understands the situation and knows the correct procedure for the task, but fails to act at the proper time, the student most probably

- B12
- 1- will be unable to cope with the demands of flying.
 - 2- is handicapped by indifference or lack of interest.
 - 3- feels that the instructor is making unreasonable demands for performance and progress.
 - 4- lacks self-confidence.

097. What should an instructor do if a student's slow progress is due to discouragement and a lack of confidence?

- B12
- 1- Assign subgoals which can be attained more easily than the normal learning goals.
 - 2- Provide unlimited help and encouragement.
 - 3- Raise the performance standards so that the student will gain satisfaction in meeting higher standards.
 - 4- Emphasize the negative aspects of poor performance by pointing out the serious consequences.

098. If a student's progress is slow due to discouragement and a lack of confidence, the instructor should

- B12
- 1- provide unlimited help and encouragement.
 - 2- accept the slow rate of progress and accept a substandard performance.
 - 3- have the student practice elements of the task involved until confidence and ability are gained.
 - 4- discontinue directing the student's attention to the unacceptable performance.

099. What is the usual result when a student has made an earnest effort, but is told that the work is not satisfactory, with no other explanation?

- B13
- 1- Increased effort.
 - 2- Frustration.
 - 3- Regression.
 - 4- Increased motivation.

100. When the instructor keeps the student informed of lesson objectives and completion standards, it minimizes the student's

- B14
- 1- individuality.
 - 2- insecurity.
 - 3- motivation.
 - 4- aggressiveness.

101. To enhance a student's acceptance of further instruction the instructor should

- B14
- 1- emphasize the student's inabilities.
 - 2- keep the student informed of the progress made.
 - 3- establish performance standards a little above the student's actual ability.
 - 4- inform the student that others in the class are progressing faster.

102. The basis on which evaluation of student performance and accomplishment should be made is established during which step in the teaching process?

- B18
- 1- Presentation.
 - 2- Preparation.
 - 3- Application.
 - 4- Review and Evaluation.

103. Before the end of each instructional period, the instructor should

- B18
- 1- conduct a subjective evaluation of the student's performance.
 - 2- emphasize that mastery of the task is more important than complete understanding.
 - 3- introduce the main features and objectives of the next lesson.
 - 4- require the student to demonstrate the extent to which the lesson objectives have been met.

104. Evaluation of student performance and accomplishment during a lesson should be based on the

- B18
- 1- student's actual performance as compared to a faultless performance.
 - 2- student's background and past experiences.
 - 3- direct comparison with the performance of other students in the class.
 - 4- objectives and goals that were established in the lesson plan.

105. Which statement is true regarding student evaluation?

- B18
- 1- Evaluation of a student's learning should be an integral part of each classroom or flight lesson.
 - 2- The preferred method of quizzing a student is by asking questions which can be answered by a "yes" or a "no."
 - 3- Tests should be developed in such a manner that no one can get a perfect score.
 - 4- Ambiguous questions tend to force one to think--therefore, they are acceptable when evaluating students.

106. Suppose during a review and evaluation of things previously learned, a deficiency or fault exists in the knowledge or performances on which the present lesson is predicated. What should the instructor do?

- B18
- 1- Correct the deficiency or fault before a new lesson is begun.
 - 2- Repeat the present lesson until the deficiency is corrected.
 - 3- Carefully note and point out the deficiency or fault and go on to the next new lesson.
 - 4- Include remedial actions in the next new lesson.

107. At the beginning of the student's training and before each flight lesson during early dual instruction, the instructor should

- B20
- 1- avoid terms and phrases which are part of the language of aviation, since they are new and strange to the student.
 - 2- define the terms and phrases which will be used during the forthcoming lesson.
 - 3- use colloquial expressions of aviation frequently so the student can learn the language of aviation.
 - 4- use picturesque expressions to brighten the instruction given.

108. Which statement is true regarding positive or negative approaches in aviation instructional techniques?

- B21
- 1- A negative teaching approach generally results in positive learning.
 - 2- Negative approaches are more effective than positive approaches.
 - 3- Positive approaches point out the pleasurable features of aviation before the critical possibilities are stressed.
 - 4- To be effective, instructors should ignore the existence of negative factors.

109. Which statement is true regarding positive or negative approaches in aviation instruction?

- B21
- 1- Negative approaches are generally more effective than positive approaches.
 - 2- A positive approach is one which stresses all the critical possibilities of aviation before the potential and pleasurable features are presented.
 - 3- The positive approach of introducing emergency procedures after the student is acquainted with normal operations is not likely to be discouraging or frightening for the student.
 - 4- A positive approach will stress that a flight maneuver or procedure must be accomplished in a certain manner or serious consequences will result.

110. Which of these is an example of a positive approach in the first flight lesson of a student with no previous aviation experience?

- B21
- 1- Instruction in the extreme care which must be taken in taxiing an airplane, with the admonition "if you go too fast it's likely to get away from you."
 - 2- A series of stalls, explaining that "this is how so many people lose their lives in airplanes."
 - 3- A series of simulated forced landings, emphasizing that "one should always be prepared to cope with engine failure."
 - 4- A normal flight to a nearby airport and return, calling the student's attention to the ease with which the trip was made in comparison with other modes of transportation.

111. Which method of presentation is desirable for a lesson on a skill such as the use of a flight computer?

- B27
- 1- Demonstration/performance method.
 - 2- Informal lecture method.
 - 3- Formal lecture method.
 - 4- Guided discussion method.

112. In the teaching process which method of presentation is suitable for presenting new material, for summarizing ideas, and for showing relationships between theory and practice?

- B27
- 1- Demonstration/performance method.
 - 2- Guided discussion method.
 - 3- Lecture method.
 - 4- Integrated instruction method.

113. The linear-programmed instruction method is based primarily on

- B27
- 1- referral to previously learned subjects.
 - 2- punishment for incorrect responses.
 - 3- involvement in class discussions.
 - 4- reinforcement (reward) for accurate performance.

114. Students should perform a maneuver or operation the right way the first few times, because

- B28
- 1- it establishes the basis for evaluation of the students' overall performance.
 - 2- that is when habits are established.
 - 3- it allows an earlier introduction of a new lesson.
 - 4- it requires less supervision and coaching by the instructor.

115. What is the proper sequence in which the instructor should employ the four basic steps in the teaching process?

- B28
- 1- Explanation, trial and practice, evaluation, and review.
 - 2- Explanation, demonstration, practice, and evaluation.
 - 3- Presentation, trial and practice, evaluation, and review.
 - 4- Preparation, presentation, application, and review and evaluation.

116. An instructor who uses the student's previous experiences and knowledge as a starting point and leads into new ideas and concepts, is teaching from the

- B29
- 1- least frequently used to most frequently used.
 - 2- simple to complex.
 - 3- known to the unknown.
 - 4- most frequently used to least frequently used.

117. The method of arranging lesson material from the simple to complex, past to present, and known to unknown, is one that

- B29
- 1- the instructor should avoid.
 - 2- creates student thought pattern departures.
 - 3- covers the areas only briefly in a normal discussion.
 - 4- shows the relationships of the main points of the lesson.

118. When teaching from the "known" to the "unknown," an instructor is using the student's

- B29
- 1- negative self-concepts.
 - 2- anxieties and insecurities.
 - 3- previous experiences and knowledge.
 - 4- likes and dislikes.

119. In organizing lesson material, which step should relate the coverage of material to the entire course?

- B32
- 1- Conclusion.
 - 2- Overview.
 - 3- Development.
 - 4- Introduction.

120. In developing a lesson, the instructor must logically organize explanations and demonstrations to help the student

- B36
- 1- learn by trial-and-error practice of the procedures.
 - 2- understand the relationships of the main points of the lesson.
 - 3- experience a minimum amount of difficulty in memorizing the steps of a procedure.
 - 4- learn by rote so that performance of the procedure will become automatic.

121. The objective of "integrated flight instruction" is to

- B36
- 1- help the student develop habit patterns for observance of and reliance on flight instruments.
 - 2- prepare the student for future instrument flying training.
 - 3- correlate the ground and flight training curriculums.
 - 4- prepare the student for emergency IFR situations.

122. During integrated flight instruction, an instructor should

- B36
- 1- always introduce the visual reference before the student attempts to perform a maneuver by instrument reference.
 - 2- be vigilant for other air traffic while the student is operating by instrument references.
 - 3- dedicate the major portion of each training period to instrument flight instruction.
 - 4- always introduce the instrument reference before the student attempts to perform a maneuver by visual references.

123. The primary objective of "integrated flight instruction" is the
- B36
- 1- formation of firm habit patterns for observing and relying on flight instruments.
 - 2- improvement in proficiency for instrument rated pilots.
 - 3- development of ability to fly in instrument weather conditions.
 - 4- building of confidence in coping with marginal weather.
124. Which of the following is an acceptable procedure when using the "integrated method of flight instruction"?
- B36
- 1- Prior to the first flight, clearly explain the differences in the manipulation of flight controls for maintaining aircraft control when under simulated instrument conditions and when using references outside the aircraft.
 - 2- Include in the student's first instruction on the function of flight controls the instrument indication to be expected, as well as the outside references used in attitude control.
 - 3- Use alternate and distinct periods devoted entirely to instrument flight or to visual flight.
 - 4- Restrict to presolo instruction the integration of visual and instrument references.
125. Should an instructor be concerned about an apt student who makes very few mistakes?
- B37
- 1- Yes; the student will lose confidence in the instructor unless the instructor invents deficiencies in the student's performance.
 - 2- No; this is an indication that the student will perform flawlessly throughout the training program.
 - 3- No; the correction of such a student's mistakes is unimportant and unnecessary.
 - 4- Yes; faulty performance may soon appear due to student overconfidence.
126. What should an instructor do if a student is suspected of not fully understanding the principles involved in a task, even though the student can correctly perform the task?
- B37
- 1- Require the student to apply the same elements to the performance of other tasks.
 - 2- Emphasize that mastery of the task is more important than complete understanding.
 - 3- Introduce a more complicated task and ask the student to explain the elements involved.
 - 4- Construct a specific and factual oral or written quiz which requires a simple "yes" or "no" answer.
127. When reviewing the lesson, the instructor should recapitulate what has been covered during the lesson to
- C01
- 1- improve the student's grades, based upon the objectives and goals of the lesson plan and syllabus.
 - 2- ensure that the student is aware of the progress made.
 - 3- emphasize the competitive nature of the learning situation.
 - 4- identify the blocks of learning which constitute the necessary parts of the total objective.
128. Which of these should be omitted from an instructor's critique of a student's performance?
- C03
- 1- Instruction in the form of direction and guidance.
 - 2- Negative criticism that does not point toward improvement.
 - 3- The student's strengths and successes.
 - 4- The student's personal feelings.
129. Which statement is true about an instructor's critique of a student's performance?
- C03
- 1- The student's personal feelings should not enter into the critique.
 - 2- It should be constructive and objective.
 - 3- It should treat every aspect of the performance in detail.
 - 4- By its nature, a critique is necessarily negative in content.

130. Which statement is true about instructors' critiques?
- C03
- 1- Instructors should rely on their position to make a critique more acceptable to their students.
 - 2- Before students willingly accept their instructors' critique, they must first accept the instructor.
 - 3- Critiques must be inflexible and not allow for variables.
 - 4- A comprehensive critique must treat every aspect of the student's performance in detail.
131. The purpose of a critique of the student's performance is to
- C03
- 1- instill student confidence in the instructor's ability and authority.
 - 2- provide direction and guidance to raise the level of the student's performance.
 - 3- identify only the student's faults and weaknesses.
 - 4- evaluate the student and assign a grade.
132. Which statement is true about an instructor's critique of a student's performance?
- C03
- 1- The critique should be subjective rather than objective in nature.
 - 2- It is a step in the learning process, not in the grading process.
 - 3- By its nature, a critique is necessarily negative in content.
 - 4- The instructor's comments and recommendations should be general rather than specific.
133. An instructor's critique of a student's performance should
- C03
- 1- treat every aspect of the performance in detail.
 - 2- identify only the faults and weaknesses.
 - 3- clearly express what was done well, what was done poorly, and how to improve the performance.
 - 4- be conducted only in private.
134. When an instructor critiques a student, it should always be
- C03
- 1- conducted immediately after the student's performance.
 - 2- subjective rather than objective.
 - 3- done in private.
 - 4- designed and executed so that the instructor cannot allow for variables.
135. When conducting a critique, the instructor should
- C03
- 1- cover only a few well-made points rather than a large number of inadequately developed points.
 - 2- cover all of the student's faults or weaknesses, large and small.
 - 3- emphasize the points covered with dogmatic and absolute statements.
 - 4- praise the student before criticizing, even if undeserved.
136. When conducting a critique, the instructor should
- C03
- 1- cover all of the student's faults or weaknesses, large and small.
 - 2- avoid trying to cover too much material.
 - 3- emphasize the points covered with dogmatic and absolute statements.
 - 4- praise the student before criticizing, even if undeserved.
137. Of the following, which is a valid reason for the use of proper oral quizzing during a lesson?
- C05
- 1- It permits the instructor to devote more time to helping weak students rather than developing written tests.
 - 2- It helps the instructor determine the general intelligence level of the students.
 - 3- It promotes active student participation.
 - 4- It is unnecessary to grade the results.

138. To be effective in oral quizzing during the conduct of a lesson, a question should
- C05
- 1- divert the student's thoughts to subjects covered in other lessons.
 - 2- center on only one idea.
 - 3- be easy for the student at that particular stage of training.
 - 4- include a combination of where, how, and why.
139. During oral quizzing in a given lesson, effective questions should
- C05
- 1- divert the student's thoughts to subjects covered in previous lessons.
 - 2- relate to more than one thought or idea.
 - 3- include a combination of who, what, when, or where.
 - 4- be difficult for the student at that particular stage of training.
140. To answer a student's question, it is most important that the instructor
- C05
- 1- clearly understand the question.
 - 2- risk a guess rather than admit ignorance.
 - 3- keep specifics to a minimum.
 - 4- have complete knowledge of the subject.
141. If a student asks a question which the instructor cannot answer, the instructor should
- C05
- 1- tell the student to reintroduce the question later, to allow time for the instructor to research the answer.
 - 2- inform the student the question is irrelevant and not pertinent to the subject being covered.
 - 3- admit not knowing the answer and promise to get the answer or help find the answer.
 - 4- tell the student to find the answer in available references.
142. One desirable result of proper oral quizzing by the instructor is to
- C05
- 1- establish a grade for the student.
 - 2- reveal the effectiveness of the instructor's training procedures.
 - 3- fulfill the requirements set forth in the overall objectives of the course.
 - 4- reveal the essential information from which the student can determine progress.
143. Proper quizzing by the instructor during a lesson can have which of these results?
- C05
- 1- It diverts the student's thoughts to unrelated subjects.
 - 2- It permits the introduction of new material which was not covered previously.
 - 3- It identifies points which need more emphasis.
 - 4- It develops a feeling in the student of matching wits with the instructor.
144. In all quizzing as a portion of the instruction process, the questions should
- C06
- 1- include catch questions to develop the student's perceptive power.
 - 2- include unrelated subject matter to increase total comprehension.
 - 3- include questions with more than one central idea to evaluate how completely a student understands the subject.
 - 4- call for specific answers and be readily evaluated by the instructor.
145. One of the main advantages of selection-type (multiple choice) test items over supply-types (essay) test items, is that the selection-type
- C07
- 1- precludes comparison of students under one instructor with those under another instructor.
 - 2- requires students to organize their knowledge.
 - 3- would be graded objectively regardless of the student or the grader.
 - 4- demands the ability of students to express ideas.

146. Which statement is true relative to effective multiple-choice type test items?

- C07
- 1- Students should be able to select the correct response only if they know it is correct.
 - 2- It is not ethical to mislead the unknowledgeable student into selecting an incorrect alternative.
 - 3- Common errors or misconceptions should not be used as incorrect alternatives.
 - 4- Students should be able to select the correct response with even slight knowledge of the subject.

147. Which statement is true about multiple-choice type test items that are intended to measure achievement at a higher level of learning?

- C07
- 1- If there are less than four alternatives, the probability of guessing the correct response is decreased.
 - 2- It is unethical to mislead the unknowledgeable student into selecting an incorrect alternative.
 - 3- The use of common errors as distracting alternatives to divert the student from the correct response is ineffective and invalid.
 - 4- Some or all of the alternatives should be nearly correct but only one should be clearly correct.

148. In developing multiple-choice type test items and the alternative responses, it is

- C07
- 1- proper to include as an alternative response a statement which itself is true but does not satisfy the requirements of the problem.
 - 2- ineffective and invalid to use common errors as distracting alternatives.
 - 3- more likely the test will contain ambiguities but will give more clues to the correct response.
 - 4- ethical to mislead the unknowledgeable student into selecting an incorrect alternative.

149. In a written test, which type of test items makes it easier to compare the performance of students within the same class or in different classes?

- C07
- 1- Selection type.
 - 2- True-False type.
 - 3- Essay type.
 - 4- Supply type.

150. Which of these is one of the major difficulties encountered in the construction of multiple-choice type test items?

- C07
- 1- Inventing distractors which will be attractive to students lacking knowledge or understanding.
 - 2- Phrasing the item in question form in lieu of incomplete statement form.
 - 3- Adapting the items to statistical item analysis.
 - 4- Keeping all responses approximately equal in length.

151. Which type of test item creates the greatest probability of guessing?

- C08
- 1- Multiple choice type.
 - 2- True-False type.
 - 3- Selection type.
 - 4- Supply type.

152. Which of the following principles should be followed in the development of true-false type tests?

- C08
- 1- Include complex statements in the questions.
 - 2- Include one or more ideas in each statement in the questions.
 - 3- Avoid absolutes such as "all," "every," and "only."
 - 4- Establish patterns in the sequence of correct responses for easier scoring.

153. Which of the following is a characteristic of supply-type (essay) test items?

- C09
- 1- The ability of the student to express ideas is not required.
 - 2- The student's specific knowledge of subject matter is readily evaluated.
 - 3- The test results would be graded the same regardless of the student or the grader.
 - 4- The same test graded by different instructors would probably be given different scores.

154. Which of the following is the main disadvantage of supply-type (essay) test items?
- C09
- 1- They increase the probability of student guessing.
 - 2- They make it possible to directly compare student accomplishment.
 - 3- They do not require students to organize their knowledge.
 - 4- They cannot be graded with uniformity.
155. The characteristic of a written test which measures small differences in achievement between students, is its
- C11
- 1- validity.
 - 2- comprehensiveness.
 - 3- discrimination.
 - 4- reliability.
156. When a written test shows positive discrimination, it will
- C11
- 1- distinguish between the students who are low and those who are high in achievement.
 - 2- sample liberally what is being measured.
 - 3- not measure what is intended.
 - 4- include a representative and comprehensive sampling of the course objectives.
157. A written test is said to be comprehensive when it
- C12
- 1- includes all levels of difficulty.
 - 2- measures knowledge of the same topic in many different ways.
 - 3- samples liberally whatever is being measured.
 - 4- shows a wide range of scores.
158. A written test has validity when it
- C13
- 1- measures small differences in the achievement of students.
 - 2- samples liberally whatever is being measured.
 - 3- yields consistent results.
 - 4- actually measures what it is supposed to measure and nothing else.
159. A written test which has reliability is one which
- C14
- 1- yields consistent results.
 - 2- samples liberally whatever is being measured.
 - 3- measures small differences in the achievement of students.
 - 4- actually measures what it is supposed to measure and nothing else.
160. Development and assembly of "blocks of learning" in their proper relationship will provide a means for
- D01
- 1- allowing the student to master the segments of the overall pilot performance requirements individually and combining these with other related segments.
 - 2- taking full advantage of both positive and negative transfer of learning.
 - 3- eliminating the need to master initial instruction in the simple elements of a task before more advanced operations can be introduced.
 - 4- both the instructor and student to easily correct faulty habit patterns.
161. Which statement is true regarding course syllabi?
- D03
- 1- They should be followed rigidly if maximum benefit is to be derived from their use.
 - 2- They should be altered to suit the student's progress and the demands of special circumstances.
 - 3- They should be used primarily by inexperienced instructors.
 - 4- They should be used primarily when teaching students who have already received part of their training from another instructor.
162. When it is impossible to conduct a scheduled lesson, it is preferable for the instructor to
- D03
- 1- revise the lesson objective.
 - 2- conduct a lesson that is not predicted completely on skills to be developed during the lesson which was postponed.
 - 3- proceed to the next scheduled lesson, or if this is not practical, cancel the lesson.
 - 4- postpone all lessons until the scheduled lesson can be completed.

163. Which statement is true concerning extraneous blocks of instruction during a course of training?
- D03 1- They assist in the attainment of the lesson's objective.
2- They provide measurable objectives.
3- They are usually necessary parts of the total objective.
4- They detract from the completion of the final objective.
164. In planning instructional activity, the second step is to
- D04 1- establish the overall objectives and standards.
2- identify the blocks of learning which constitute the necessary parts of the total objective.
3- develop lesson plans for each period or unit of instruction.
4- determine the personality and intelligence level of assigned students.
165. In planning any instructional activity, the first consideration should be to
- D04 1- identify the "blocks" of learning which make up the overall objective.
2- determine the overall objectives and standards.
3- develop a sequence of training periods.
4- determine aptitudes of the students.
166. In developing a lesson plan for an in-flight lesson on "ground reference maneuvers," which of these would correctly state the true objective of the lesson?
- E01 1- "To develop the student's skill in planning and following a pattern-----."
2- "To explain and demonstrate the principles of planning and following a pattern-----."
3- "To cover the principles of planning and following a pattern-----."
4- "To learn the principles of planning and following a pattern-----."
167. Which statement is true regarding lesson plans?
- E02 1- The use of standard prepared lesson plans for all students is most effective.
2- Lesson plans should not contain elements of knowledge or skill previously learned.
3- Lesson plans should clearly state the desired student learning outcomes.
4- To be effective, lesson plans need not be in written form.
168. Which statement is true about lesson plans?
- E04 1- A good flight training lesson plan will eliminate the need for a review of earlier lessons.
2- The lesson should contain new facts, principles, procedures, or skills related to a previous lesson.
3- The use of a rigidly prepared lesson plan should be used for an instructional flight.
4- An effective lesson plan may be only a mental outline.
169. With regard to the characteristics of a well-planned lesson, each lesson should contain
- E04 1- all the information needed to reach the objective of the training syllabus.
2- only one element of a simple principle, procedure, or skill.
3- new material that is related to the lesson previously presented.
4- information that is independent of earlier lessons.
170. Which statement is true regarding lesson plans?
- E06 1- Rigidly followed lesson plans for all students is most effective for instructional flights.
2- Lesson plans should not be directed toward the course objective; only to the lesson objective.
3- Lesson plans should not contain material or skills previously learned.
4- To be effective, lesson plans must be in written form.

171. If lesson plans are constructed in a proper manner, they will provide an outline for
- E06
- 1- each lesson of the course without regard to the student/instructor relationship.
 - 2- blocks of learning that become progressively larger in scope.
 - 3- the teaching procedure to be used in a single instructional period.
 - 4- proceeding from the unknown to the known.
172. With regard to the use of a lesson plan for conducting a ground school period, which statement is true?
- E08
- 1- If the lesson plan is not leading to the desired results, the instructor should change the approach.
 - 2- A carefully thought-out lesson plan has little or no bearing on achieving teaching success.
 - 3- A lesson should provide as much information related to the subject as possible.
 - 4- An approach which has been successful with one group is always successful with another.
173. Which statement is true regarding lesson plans?
- E08
- 1- The rigid use of prepared lesson plans for all students is most effective.
 - 2- Lesson plans should not include reviews of earlier lessons.
 - 3- Lesson plans help instructors keep a constant check on their own activity as well as that of their students.
 - 4- Lesson plans may be either "mental outlines" or in written form.
174. Which of these should be the first step in preparing a lecture?
- F01
- 1- Planning productive classroom activities.
 - 2- Organizing the material.
 - 3- Establishing the objective and desired outcomes.
 - 4- Researching the subject.
175. The preferred method for conducting a teaching lecture is to
- F01
- 1- memorize the material to be presented.
 - 2- speak extemporaneously from an outline.
 - 3- speak impromptu with a minimum of specifics.
 - 4- read from prepared material.
176. Which teaching method provides no accurate means of checking student learning?
- F01
- 1- Lecture method.
 - 2- Programmed instruction method.
 - 3- Guided discussion method.
 - 4- Demonstration-performance method.
177. Which teaching method is particularly suitable for introducing a subject and is the most economical in terms of the time required to present a given amount of material?
- F01
- 1- Programmed instruction method.
 - 2- Demonstration-performance method.
 - 3- Guided discussion method.
 - 4- Lecture method.
178. The teaching lecture is probably best delivered by
- F01
- 1- reciting memorized material without the aid of a manuscript.
 - 2- speaking extemporaneously from an outline.
 - 3- speaking impromptu without preparation.
 - 4- reading from a typed or written manuscript.
179. In the teaching lecture, the use of which of these would detract from the instructor's dignity and reflect upon the student's intelligence?
- F01
- 1- Simple words.
 - 2- Free-and-easy colloquialisms.
 - 3- Picturesque slang.
 - 4- Errors in grammar and vulgarisms.

180. The instructor can best inspire active student participation in informal lectures through the use of

- F01
- 1- negative motivations.
 - 2- humor.
 - 3- questions.
 - 4- visual aids.

181. In regard to the teaching lecture, which of these statements is true?

- F01
- 1- The instructor must develop a keen perception for subtle responses and must be able to interpret the meaning of these reactions.
 - 2- Delivering the lecture in an extemporaneous or off-hand manner is not recommended.
 - 3- The teacher receives direct reaction from the student in the form of verbal or motor activity.
 - 4- New ideas should be introduced in the conclusion of the lesson.

182. The distinguishing characteristic of an informal lecture is the

- F01
- 1- relative importance of the subject.
 - 2- use of visual aids.
 - 3- student's participation.
 - 4- lack of a central idea.

183. Which of these questions would be best as a lead-off question for a guided discussion on the subject of torque?

- F02
- 1- Does torque affect the airplane?
 - 2- Are there 4 or 5 factors involved in torque?
 - 3- In which direction does torque affect the airplane?
 - 4- How does torque affect the airplane?

184. When a guided discussion is being conducted the instructor should

- F02
- 1- never use a reverse question in response to a student's question.
 - 2- discourage students from asking questions.
 - 3- make no comments during the discussion.
 - 4- remember that the more intense the discussion and the greater the participation, the more effective the learning will be.

185. When it appears students have adequately discussed the ideas presented during a guided discussion, one of the most valuable tools an instructor can use is

- F02
- 1- a written test on the subject discussed.
 - 2- an immediate recess or dismissal of the class.
 - 3- a taped recording of the discussion.
 - 4- an interim summary of what the students accomplished.

186. Learning is produced in a guided discussion through the skillful use of

- F02
- 1- demonstrations.
 - 2- lectures.
 - 3- negativism.
 - 4- questions.

187. In preparing questions for a guided discussion, the instructor should remember that the purpose is to

- F02
- 1- require that students research the topic.
 - 2- evaluate and grade the student's knowledge.
 - 3- bring about discussion to develop an understanding of the subject.
 - 4- get answers to student questions.

188. Which statement about the guided discussion method of teaching is true?

- F02
- 1- The instructor should answer all student questions--never reverse or relay the questions to the class.
 - 2- The more intense the discussion and the greater the participation, the less effective the learning will be.
 - 3- Students without a background in the subject should be included in the discussion.
 - 4- Unless the students have some knowledge to exchange with each other, they cannot reach the desired learning outcomes.

189. In a guided discussion, learning is produced through

- F02
- 1- explanations and demonstrations.
 - 2- discussion of a topic in which students have little or no background.
 - 3- the skillful use of questions.
 - 4- tutorial instruction.

190. During a ground training session, how can the instructor more effectively stimulate group discussion?

- F02
- 1- By selecting a subject in which students lack knowledge.
 - 2- By creating a generally relaxed, informal atmosphere.
 - 3- By delivering a comprehensive lecture.
 - 4- By creating an atmosphere of sternness.

191. The basic demonstration-performance method of instruction consists of several steps. In proper order, they are

- F03
- 1- instructor tells--student does; student tells--student does; student does--instructor evaluates.
 - 2- instructor tells--instructor does; student tells--instructor does; student tells--student does; student does--instructor evaluates.
 - 3- instructor does--instructor tells; student does--instructor tells; student does--student tells; student does--instructor evaluates.
 - 4- instructor tells--instructor does; student tells--instructor does; student does--instructor evaluates.

192. What are the essential steps in the demonstration-performance method of teaching?

- F03
- 1- Demonstration, practice, and evaluation.
 - 2- Motivation, presentation, summary, and closure.
 - 3- Explanation, demonstration, student performance, instructor supervision, and evaluation.
 - 4- Demonstration, student performance, and evaluation.

193. In the demonstration-performance method of instruction which two separate actions are performed concurrently?

- F03
- 1- Instructor demonstration and evaluation.
 - 2- Student performance and instructor supervision.
 - 3- Instructor explanation and evaluation.
 - 4- Instructor explanation and student demonstration.

194. If, due to some unanticipated circumstances, the instructor's demonstration does not closely conform to the explanation, the instructor should

- F03
- 1- lower the standards when the student performs the task.
 - 2- "downplay" or ignore the discrepancy as being unimportant to the demonstration.
 - 3- disguise the discrepancy with unrelated instruction.
 - 4- immediately acknowledge and explain the discrepancy.

195. Instructional aids used in the teaching-learning process should be

- F04
- 1- self-supporting and should require no explanation.
 - 2- selected prior to developing and organizing the lesson plan.
 - 3- used to supplant the instructor's oral presentation of a lesson.
 - 4- concentrated on the key points of the lesson.

196. The use of instructional aids should be based on their ability to support a specific point in the lesson. What is the first step to determine if and where instructional aids are necessary?

- F04
- 1- Decide at what point in the lesson the student's interest must be rekindled.
 - 2- Clearly establish the lesson objective, being certain what must be communicated.
 - 3- Gather necessary data by researching for support material.
 - 4- Organize subject material into an outline or a lesson plan.

197. Instructional aids used in the teaching-learning process should not be used

- F04
- 1- if detailed schematics are necessary to explain elaborate equipment.
 - 2- as a crutch by the instructor.
 - 3- for teaching more in less time.
 - 4- in conjunction with verbal presentations.

198. An instructor cannot retain the reputation of a professional if that person

- G03
- 1- accepts students as they are with all their faults and problems.
 - 2- does not demand higher pay.
 - 3- instructs on a part-time basis.
 - 4- gives the impression that interest in instruction is secondary to other activities.

199. Which personal habit of an instructor is perhaps the most important one that affects the professional image?

- G09
- 1- Common courtesy.
 - 2- Manner of speech.
 - 3- Attire.
 - 4- Personal cleanliness.

200. Which of these will make it impossible for the instructor to command the interested attention of the student?

- G09
- 1- Limiting actions and decisions to standard patterns and practices.
 - 2- Hiding some inadequacy behind a smokescreen of unrelated instruction.
 - 3- Creating a relaxed, informal atmosphere in the classroom.
 - 4- Insisting on correct techniques and procedures from the outset of training.