



Kadi Sarva Vishwa Vidyalaya
Gandhinagar

Ph. D. Course Work

For

FACULTY OF EDUCATION

Year: 2009-10

Introduction:

The course work for the doctoral research has been made mandatory by the U.G.C. Kadi Sarva Vishwa Vidyalaya has decided to implement this aspect on the immediate basis for the benefit of the students pursuing Ph.D. The course work is designed in such a way as to support, motivate and encourage quality research. By undergoing this course work, the scholar will get equipped with fundamentals of research methodology, scientific communication and also recent developments in the field of specialization. The course work has to be completed by the scholar in a satisfactory way before submission of his/her dissertation thesis.

Course Structure

Paper	Title	Common syllabus for all discipline Section -A	Specific syllabus for each discipline Part -B	Total Marks
I	Research Methodology	60	40	100
II	Scientific Communication	60	40	100
III	Specialization Paper	—	—	100

Paper – 1 Syllabus

RESEARCH METHODOLOGY AND DATA ANALYSIS

Rationale:

The only static thing in the world is “change” in every field of human endeavor. It has increased the complexities in every field including education because every now and then novel situations are emerging. Emergence of these situations is inevitable. Hence in order to resolve them, it is essential to understand these situations from their derivation point and adopt systematic and scientific approach. Research Methodology and Data Analysis helps educators to address to these aspects in more systematic and scientific way. Hence the course “Methodology of Educational Research and Data Analysis” is introduced for Ph.D. in Education.

Objectives:

To enable students to

1. develop the understanding about the concept and significance of Research in education
2. develop insight in identification of research problem and preparation of research proposal
3. develop scientific aptitude and rational attitude toward solving a problem
4. develop understanding about the use of different types of research tools & techniques.
5. develop insight into different methods of research in education
6. learn to write a good research report
7. plan for different types of research designs.
8. acquire the skill of presenting data in graphical form
9. get acquainted with the skill in applying statistical techniques for data analysis

UNIT:1 Introduction to Educational Research

- 1.1 Nature, Meaning, Characteristics of Research and Educational Research
- 1.2 Need or Significance of Educational Research
- 1.3 Purpose of Research: Basic or Fundamental, Applied and Action Research
- 1.4 Areas of Educational Research: Problems related to Content, Different Stages and Sectors of Education and Teaching process.
- 1.5 Steps in Research process

UNIT:2 The Research Problem and Preparation of the Research Proposal

- 2.1 Selection of the Problem, Definition and Statement of the Problem, Evaluation of the Problem, Criteria and sources for identifying the problem
- 2.2 Use of reference material source, library survey and internet surfing
- 2.3 Variables- Dependent, Independent, Intervening, Control
- 2.4 Delineating and Operationalizing variables
- 2.5 Writing Objectives
- 2.6 The Hypothesis: Nature, Definition and Characteristics of Good Hypothesis, Various types of hypothesis-Directional and Non Directional Hypothesis
- 2.7 Steps in Preparation of Research Proposal

UNIT: -3 Tools and Techniques for Data Collection

- 3.1 **Sampling:** Concept of Population and Sample, Characteristics of a Good Sample, Non Probability Sampling, Probability Sampling, Methods of Sampling: Random, Stratified, Purposive, Cluster and Quota Sampling, Sampling Errors and how to reduce them

3.2 Tools of Educational Research

3.2.1 Concept, types, forms, preparation (Construction), characteristics, validity, reliability, advantages and limitations of following tools: Questionnaire, opinionnaire, Interview, Observation, Rating scale, Attitude scale, Check-list

3.2.2 Standardized tests: Types and characteristics, Criteria for selecting a standardized test, NRT and CRT, Some standardized tests available in Gujarati language (Sp)

UNIT: -4 Methods of Research:

4.1 Descriptive Research, Historical Method, Survey Method, Ex post Facto Research, Developmental Research, Experimental and Quasi Experimental Research, Designs of experimental research, characteristics, Internal and external validity in experimental research.

4.2 Qualitative Research: Concept.

UNIT: -5 Data Presentation

5.1 Concept of Statistics

5.2 Parametric and Non Parametric Data: Concept and Scales of Measurement, Uses of Parametric and Non Parametric Tests

5.3 Descriptive and Inferential Analysis: Concept

5.4 Organization and Graphical Representation of Data: Drawing up a Frequency Distribution

5.5 Graphical Representation of The Frequency Distribution: Concept, Frequency Polygon, Histogram or Column Diagram, Ogive

UNIT:-6 Descriptive and Inferential Statistical Techniques for Data Analysis

6.1 Descriptive Statistics: Measures of Central Tendency, Measures of Variability, Measures of Relative Position and Correlation

6.2 Non Parametric Techniques: The Chi Square Test(single strata and 2x2 small sample only), Sign Test, Median Test, The Mann-Whitney U Test, Candle's W Test

6.3 Parametric Techniques: The Significance of the Difference between the Means, SDS and Percentages of Two Independent Groups as well as correlated group, Level of Significance, Types of Errors, Two Tailed and One Tailed Tests of Significance, Degree of Freedom, t-test and F test (One Way and Two Way ANOVA)

UNIT: -7 The Writing of Research Report and Its Evaluation:

7.1 General and Essential Considerations Format of Thesis/Dissertation, Quotations, Footnotes, Bibliography, Table and illustrations, Style and Typing,

7.2 Probable errors aroused while report writing

7.3 Criteria for evaluating research report

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PAPER-I
RESEARCH METHODOLOGY
Model Question Paper
PART-A

OBJECTIVE TEST ITEMS:

1. When we say that educational research should be reliable, we are emphasizing:
 - a. generalizability.
 - b. replicability.
 - c. accuracy.
 - d. interpretability.

2. An educational psychologist conducting research in a learning laboratory is most likely engaged in:
 - a. action research.
 - b. applied research.
 - c. basic research.
 - d. survey research.

3. The major distinction between basic and applied research is in the:
 - a. methodology used.
 - b. purpose.
 - c. use of samples vs. populations.
 - d. replicability of results.

4. Of the following, the characteristic most closely associated with quantitative research is:
 - a. detached role of the researcher.
 - b. narrative description.
 - c. emphasis on the specific context.
 - d. observer-participant role of the researcher.

5. The difference between experimentation and other types of research is the:
 - a. number of dependent variables included.
 - b. manipulation of one of more independent variables.
 - c. statistics used to analyze the data.
 - d. confidence in the validity of the research.

6. Action research is usually conducted for the purpose of:
 - a. adding to the knowledge base.
 - b. developing theory.
 - c. solving a specific problem.
 - d. revising theory.

7. In a study of the effects of teaching method upon science achievement, the differences between the four schools in which the study was conducted were also determined. School is:
 - a. a dependent variable.
 - b. a moderator variable.
 - c. a control variable.
 - d. an intervening variable.

8. A hypothesis is a:
- true statement unless proven false.
 - false statement until proven true.
 - statement of fact.
 - conjecture.
9. "A negative relationship exists between time required to complete a cognitive task and score on an I.Q. test," is an example of a:
- directional hypothesis.
 - nondirectional hypothesis.
 - null hypothesis.
 - b and c above.
10. Which of the following would likely be the most valuable outcome of a review of the literature prior to beginning a research project? It enables the researcher to:
- expand the research problem.
 - acquire information about methods used by other researchers.
 - replicate a successfully completed project.
 - identify key words for the project.
11. The analysis of variance is commonly used to test hypotheses about:
- two means.
 - two standard deviations.
 - more than two means.
 - two or more frequencies.
12. The two sources of information published by ERIC are:
- RIE and CIJE.
 - RIE and the Education Index.
 - CIJE and the Education Index.
 - RER and RIE.
13. If a researcher is interested in obtaining information about the strengths and weaknesses of research in an area, of the following, the source likely to be most useful is:
- Handbook of Research on Teaching.
 - Encyclopedia of Educational Research.
 - Review of Educational Research.
 - Thesaurus of ERIC Descriptors.
14. When conducting a review of a research report, the reader focuses on the extent to which the results have been generalized. At this point the reader is concerned with the _____ validity of the research.
- construct
 - external
 - internal
 - logical

15. In a dissertation proposal, a subheading titled "Design" would most likely be found in the:
- statement of the problem.
 - procedures section.
 - review of the literature.
 - analysis section.
16. Data analyses are to results as conclusions are to:
- statistics.
 - facts.
 - existing knowledge.
 - inferences.
17. Of the following, which is part of the "back matter" of a research report?
- appendix
 - abstract
 - table of contents
 - title page
18. One of the most commonly identified errors in research reports is:
- lack of an adequate research problem statement.
 - lack of reliability and validity information.
 - lack of adequate detail about the design.
 - lack of references.
19. A study was conducted in which researchers developed an instrument for measuring teacher perceptions of school operations, the instrument containing three subscales each with 10 rating scale items. Data from teachers in six schools were used as a data base. The most likely error in reporting this study is:
- the content of the measuring instrument does not fit the problem statement.
 - omission of reliability and validity information concerning the instrument.
 - lack of analyzing results across the three subscales.
 - inadequate review of related literature.
20. When there are problems found in the results section of a research report, it will most likely be due to
- too many statistical results being reported.
 - the results not being related to the research problem.
 - the results contradicting the current thinking of experts in the field.
 - too few statistical results being reported.
21. Identifying how school administrators or teachers can use the findings of a research study in their daily work is called the
- results.
 - conclusions.
 - implications.
 - recommendations.

22. In a study of the effects of various factors that may affect reading achievement of third grade students, which characteristic (or variable) of the students would most likely be controlled by building the variable into the design as an independent variable?

- a. intelligence
- b. age
- c. motivational level
- d. gender

23. Error variance is variance due to:

- a. differences between experimental groups.
- b. mistakes made by the researcher.
- c. random assignment and unaccounted for factors.
- d. independent variables.

24. In quantitative research, the formulation of hypotheses is an activity usually associated with:

- a. identification of the problem.
- b. data collection.
- c. analysis.
- e. assembling the results.

25. When all groups in an experimental design are both pretested and posttested:

- a. we can check on the effects of pretesting.
- b. the pretest may affect the posttest results.
- c. both a and b are true.
- d. neither a nor b is true.

26. In an experiment, the control group is the group that:

- a. is most representative of the population sampled.
- b. receives the first experimental treatment.
- c. receives no treatment or receives traditional treatment.
- d. contains those subjects not willing to participate in the regular program

27. Of the following questions, which deals with internal validity?

- a. Was the sample representative of the population?
- b. Can the results of the experiment be generalized?
- c. Has history affected the dependent variable?
- d. Are hypotheses stated in question form?

28. Suppose the researcher is interested in whether or not there is a difference between the performances of male and female rats. This could be checked by:

- a. using rats of only one sex.
- b. randomly assigning male and female rats to the drug doses.
- c. including sex of the rat as an independent variable.
- d. including rats of only one sex for any drug-dosage group.

29. A $2 \times 2 \times 3$ complete factorial design is used for an experiment. The number of groups required is:

- a. 2
- b. 4
- c. 6
- d. 12

30. Single-subject designs are particularly well suited for:
- case study research.
 - research on behavioral problems.
 - neither a nor b.
 - both a and b.
31. Single-subject designs would be most applicable to research on:
- behavior modification.
 - the most effective mathematics curriculum.
 - performance differences between boys and girls on physical performance tasks.
 - teaching strategies and their effectiveness.
32. The surveys conducted by polling agencies on voter preference during the three months or so prior to the election are:
- cohort studies.
 - panel studies.
 - trend studies.
 - All of the above
33. If data are collected at only one point in time, the survey is a:
- cohort study.
 - cross-sectional study.
 - panel study.
 - trend study.
34. The purpose of conducting a pilot run of the items for a questionnaire is to:
- check the time required to complete the questionnaire.
 - identify ambiguous items.
 - identify possibly confusing directions.
 - all of the above.
35. An advantage of selected-response items over open-ended items is:
- consistency of response across respondents.
 - less time required for constructing.
 - providing the respondent with more flexibility.
 - inconsistency in response length.
36. An interview is preferred to a mailed questionnaire when:
- sample size is less than 50.
 - in-depth response is necessary.
 - only selected-response items are used.
 - both selected-response and open-ended items are used.
37. The major disadvantage of telephone interviews compared to face-to-face interviews is:
- higher refusal rates.
 - reduced flexibility.
 - problems in the quality control of data collection.
 - cost.

38. Coding is a process of:

- a. data analysis.
- b. data reduction.
- c. information organization
- d. all of the above.

39. Historical research is useful for:

- a. providing a perspective for decision-making about educational issues.
- b. the process of policy making.
- c. avoiding mistakes of the past.
- d. all of the above.

40. When conducting historical research, the researcher should rely as much as possible on:

- a. preliminary sources.
- b. primary sources.
- c. secondary sources.
- d. theoretical sources.

41. The emphasis of internal criticism is on the:

- a. source of the material.
- b. authenticity of the material.
- c. location of the material.
- d. content of the material.

42. There is concern that a written document used for historical research may be a forgery. This is an issue of:

- a. external criticism.
- b. internal criticism.
- c. establishing a primary source.
- d. establishing a secondary source.

43. Of the following historical documents, which is most likely to be analyzed using quantitative methods?

- a. biography of an educational leader
- b. census report
- c. policy statement of a board of education
- d. minutes of a faculty meeting

44. A random sample of size 90 is selected from a population of over 2,000 students. The sample is measured on an achievement test and the mean score on the test is 79.5. The difference between the sample mean and the population mean is due to:

- a. sampling bias.
- b. sampling error.
- c. the sampling fraction.
- d. sampling stratification.

45. If a population is divided into subpopulations and random samples are selected from all subpopulations, the sampling design is:

- a. stratified sampling
- b. cluster sampling
- c. systematic sampling
- d. simple random sampling

46. A sample is selected using names on a list. The initial member is selected randomly from the first 15 names on the list, and every 15th name is taken from that point on. The sampling design is:
- stratified sampling.
 - cluster sampling.
 - systematic sampling.
 - two-stage sampling.
47. A measurement scale that orders the scores and contains an equal unit is a (an):
- nominal scale.
 - ordinal scale.
 - interval scale.
 - category scale.
48. Reliability coefficients can take on values:
- from zero to 1.0 inclusive.
 - from -1.0 to 1.0 inclusive.
 - greater than 1.00.
 - of any real number.
49. A test is divided into two parts of equal length and the scores for the parts correlated. We are most likely attempting to establish test:
- reliability.
 - objectivity.
 - validity.
 - usability.
50. Standardized achievement tests have the following characteristics:
- norms are available.
 - they are technically well constructed.
 - high reliability coefficients.
 - all of the above.
51. Likert scales are most closely associated with:
- achievement batteries.
 - personality tests.
 - performance tests.
 - attitude inventories.
52. A researcher is interested in obtaining a measure of teacher performance. The most appropriate measurement instrument would be an (a):
- aptitude test.
 - observation inventory.
 - self-report inventory.
 - interest inventory.
53. The standard deviation squared is the:
- range.
 - mean deviation.
 - standard error of estimate.
 - variance.

54. The correlation between two variables is $-.65$. This means that:
- as X increases, Y increases
 - as X decreases, Y decreases.
 - as X increases, Y decreases.
 - the variables are independent.
55. Parameter is to statistic as:
- population is to sample.
 - sample is to population.
 - probability is to fact.
 - sampling distribution is to sample.
56. A “statistic” as a measure in inferential statistics is obtained from:
- a sample.
 - a population.
 - either a population or a sample.
 - a parameter.
57. The difference between two means is statistically significant at the $.05$ level of significance. This means that:
- five percent of the difference is significant.
 - the difference between the means is due to random sampling fluctuation.
 - there is less than a $.05$ probability that the difference occurred by chance.
 - there is a $.95$ probability that the difference occurred by chance.
58. In which kind of research, manipulation of variable is necessary?
- Action Research
 - Experimental Research
 - Causal comparative Research
 - Ethnographical Research.
59. Ogive gives no help in the estimation of :
- Median
 - Percentiles
 - Percentile Ranks
 - Mode
60. Which of the following is the highest level of significance?
- 0.10
 - 0.20
 - 0.01
 - 0.001

PART-B

Q. 1 Answer each question in one or two lines only.

1. Applied & Action Res. Whose findings are more applicable why.
2. What is the main limitation of Action Research?
3. As a class teacher, you feel that some students are not attentive in the class –room. Supposed you want to find-out its solution. Such study will fall in which area of research?
4. A researcher wants to study the contributions made by a institution in up-lifting deprived class-student. What would be your source of related literature?
5. If the population is homogeneous. What sampling technique will be the most suitable?
6. A researcher wants to identify indicators of successful teacher. Which one will be the best tool for data collection? Why
7. Why questionnaire is treated as a laziest way for data collection?
8. What is the main difference between Test and Inventory?
9. An investigator wants to study main and interaction effect of sex, std (8 to 12) and level of I.Q. (high, Ave. & Low). What would be the nature of his factorial design?
10. What would be content of preliminary part of a dissertation?
11. You have selected two successive quotations from the same book and from the same page. Which abbreviation will you use to write its foot-note?

Q. 2 Answer each question in three to four lines only.

1. Point out main two differences between applied research and fundamental research regarding researcher's qualities.
2. A researcher wants to conduct a qualitative research based on contribution made by one NGO. What would be source of related literature for reviewing the past researches?
3. If you want to submit your research proposal to a funding agency like NCERT. How your proposal will differ from your M.Ed. dissertation proposal?
4. Suppose you want to select two groups, true experimental design. What would be your sampling technique?
5. What is multi-stage –random sampling technique?
6. How will you validate the responses recorded on questionnaire by a respondent?
7. You have two different Research report (M.Ed. & Ph.D.) without its title page. How will you identify them?

Q. 3 Answer each question in about 125 words.

1. What are the areas of research directly relevant with Learner and Teacher? Write three - three research problem related to both the aspect.
2. A class teacher observes that a group of student can't-respond in the class-room due to their language disability. If the class teacher wants to prepare a remedial programme and wants to solve the problem. Work out the research work into important steps to be adopted.
3. An innovative teacher wants to practice three different teaching methods in three different equivalent groups. For that he has selected three equivalent teaching units from the present syllabus. Present the experiment diagrammatically and explain it in short.

OR
PART-B

Assignments

1. 1 Select any area of Educational Research related to secondary, Higher secondary and Teacher education. Identify minimum 10 related researches quoted in Survey o Educational Research Vol II to Vol VI Carrey out its review. Make Meta analysis of the findings of selected researches and identify research gaps Enlist at least five Research Statements based on research gaps so that one can carry out research in future.
- 2 Select any standardized test .Administer it on 100 students selected from 10 different schools of the same S.V. S. Prepare a report of it in the form of research paper.
- 3 Prepare and present a paper (Study paper or Research Paper) at state level or National lever seminar Submit it along with certificate issued by the seminar organizer.
- 4 Select any research problem related to class-room teaching –innovative practice and prepare a research proposal suit to the format prescribed by ERIC, NCERT, NCTE, NAAC or any equivalent funding agency.

Paper II
Scientific communication
Syllabus

1. Basics of Communication skill, types of scientific communication
2. English Grammar –word selection, punctuation, sentence structure, paragraph structure, letter, précis writing
3. importance of publishing papers
4. Norms and standards of writing research papers and publishing papers;
 - a) reviewing and recording from books, Journals, articles and thesis
 - b) writing titles, running title
 - c) authors-single and multiple authorship
 - d) writing abstract/summary/ briefs/
 - e) selecting key words
 - f) writing introduction of the paper
 - g) tools and methods selection
 - h) writing result
 - i) presentation of figures, designs, table components, Graphs; types, style, table v/s graph
 - j) discussion section; Format, Drawing conclusion, Language style
 - k) acknowledgment
 - l) references : Different style
 - m) communication with the Editor, Reviewing Referees' Comments, Galey Proofs
5. Writing Review Articles
6. Preparing Posters for Scientific Presentation
7. Preparing and Delivering of Oral Presentation of Research Paper and handling questions
8. Writing reports
9. Avoiding Plagiarism
10. Funding Agencies for Research work, Preparing project proposal and applying for financial assistance / grant

11. Patent drafting and submission

12. IUPAC symbols and terminology, Standard Abbreviations and Symbols

13. Preparing documents for MoUs, Confidentiality Agreements

Reference Books

1. Study and communication Skills for the Biosciences by Stuart Johnson and Jon Scott, Oxford University Press
2. Write and Publish a Scientific Paper by Robert A. Day Oryx Press
3. Scientific Easy when you know how by Jennifer Peat BMJ Books

MODEL QUESTION PAPER FOR

Paper-II , Scientific Communication

SECTION 'A'

Answer the following questions

(30)

Q 1 (A) Each of the following sentences is divided into three parts (a,b and c) one of which might contain an error. Spot the error and mark that part as an answer. If the answer is correct, mark "No error"

- a). Prakash was leading a (a) / happy and leisurely life (b) / after he retirement from service (c) / no error (d)
- b). Being (a) / a very hot day I stayed at home (b) / and prepared for my exam (c) / no error (d)
- c). Transporting goods (a) / by sea (b) / is cheaper than land (c) / no error (d)
- d). If my father (a) / allows (b) / I will went to Bombay (c) / No error
- e). He told me (a) / the same old story (b) / in great details (c) / no error (d)

(B) The following sentences are in direct speech. Choose the appropriate indirect of reported form the choices (a,b,c and d)

a) Joby said, "How dreadful !"

- (i)exclaimed that it was dreadful.
- (ii) exclaimed that it is dreadful.
- (iii) Said how dreadful is it.
- (iv) Said how was it dreadful.

b) Meena said, "Study well"

- (i) told me to study well.
- (ii) told me I study well.
- (iii) told me to study well.
- (iv) said I study well

(c) David said, "What time is it?"

(i) asked what time is it.

(ii) Said it was time.

(iii) asked what time it was.

(iv) Asked what time was.

d) Raja said, "The letter's here"

(i) The letter would be there

(ii) the letter is here

(iii) the letter had been there

(iv) the letter was there

e) Sam said, "Where is she?"

(i) said where is she?"

(ii) said where was she

(iii)asked where she was

(iv) asked where she is

(C) Read the passage carefully and choose the correct answer from the given options

In most countries, it is required that every young man, when his education is complete, shall give three, four or five years to military service. He goes into barracks, is regimented and drilled, makes a unit in the standing army and passes out usually when his term ends, an efficient soldier, to remain for the rest of his life ready at any moment to join in the armed defence of his country.

(a). in the passage the author opines that

(i) Military training must be included in the curricula of school and college

(ii) Military training as important as general training

(iii) Military training should precede college education since it builds up ones mental and physical abilities.

(iv) military training is more important than general education.

(b). the author writing in the early part of the 20th century, does not seem to talk about the need of military training for women because.....

- (i) She thinks women are not physically strong enough to undergo military training.
- (ii) Women should remain indoor.
- (iii). Women taking part in military service is only a recent phenomenon.
- (iv). Women education was a new thing then.

(c) Every young man has to undergo military training because he can ..

- (i). join the army whenever his country needs to be defended in war
- (ii) Get a job after such training
- (iii) Learn and practice discipline
- (Iv) Supplement his general education according to his wish.

(d) Military training is as important as mental training because..

- (i) One gets a chance to live in barracks
- (ii) Other wise young men are useless
- (iii) war has become a daily affaire
- (iv) it is good that every scholar should also be an efficient soldier and be available for the country's defence

(e) In eastern countries like India, military training of students should be made compulsory

.....

- (i) As it can solve the unemployment problem by providing more jobs
- (ii) To fight the anti social elements in every village or town
- (iii) To repress communal riots
- (iv) To make the youth serve the nation during times of war and peace

Paper III – Core Course

Unit -1 Philosophy:

- Indian schools of philosophy
 - {1} Jainism {2} Vedanta {3} Buddhism {4} Islamic
- New Paradigms:
 - {1} Experimentalism {2} Perennialism
- Educational Contribution of Indian Thinkers
 - {1} Mahatma Gandhi {2} Shree Arbindo
 - {3} Ravindranath Tagore {4} Swami Vivekananda.

Unit :2 Sociology:

- Impact of Globalization, privatization and modernization as the social development of a learner .
- Social justice and Equality of education { With Reference to Caste, Gender, Language, Religion, Economically, Book word, Schedule cast }

Unit :3 Educational Psychology

- Educational Psychology: Concept, Nature and Scope and application of different schools of psychology in the content of secondary school education
- Theories of Learning : Tolman ,Guthrie, Lewin, Hull's reinforcement
- E-Learning: Concept and Nature
- Factors affecting Learning : Teacher related, school related, Learner related, home related.
- Mental Health: Concept, affecting Factors, Adjustment and mental health.

Unit :4 Information and Communication Technology

- Self learning Techniques and use of information Technology.
- General abbreviations and terminology.
- Concept, need and importance of e-learning.
- Communication : Concept ,aspects of communication and communication

Unit :5 Teacher education

- Concept of Teacher education & Objectives of Teacher Education at various level.
- Role of different agencies like UGC,NCTE,GCERT,NAAC in Teacher education.
- Problems and issues of teacher education in India.
- Professional Ethics for teachers
- Existing evaluation practices in teacher education.

Unit :6 Measurement and evaluation

- Bloom's Taxonomy
- Measurement of scholastic subjects at se secondary school level.
- Norm reference test & Criterion reference test
- Concept, need Procedure of construction of CRT & NRT and difference between them.
- Exam Reform at different levels of education

Unit :7 Curriculum Development

- Concept & need for Curriculum Development.
- Methods of Curriculum Development
- Historical Perspective of Curriculum Development
- Need of reform in Curriculum Development
- Evaluation of curriculum & Text book.

Unit :8 Psychological Testing

- Meaning and nature of Psychological Testing.
- Classification of Psychological Test.
- Process of Test Construction and standardization including Achievement Test.
- Psychological Tests available in Gujarat.

Unit :9 School Administration and Management

- Concept of Administration & Management
- Role of Administration and Management in Quality improvement of present school education
- SWAOT analysis of different stake holders at school level.
- Concept of effective class-room management.

Unit :10 Guidance and Counseling

- Nature, Scope, Concept and types of Guidance.
- Nature, Scope, Concept and types of Counseling
- Role of Counselor
- Guidance and Counseling of a child with special needs.

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Ph.D. Course Work
Model Paper -3 Education
Part -A

Question -1 (Objective test items)

(40)

- (1) Which system of Education was propounded by Mahatma Gandhi?
 - (A) Teaching by activities
 - (B) Basic Education
 - (C) Teaching Through music
 - (D) All of the above

- (2) One of the three Principles of shi Aurbindo's Education Philosophy is
 - (A) Everything can be taught
 - (B) Something can be taught
 - (C) Nothing can be taught
 - (D) None of the above

- (3) Experience is the real test of all situations the truth is that the one who gets success on these tests” This statement reflects which ism?
 - (A) Idealism
 - (B) Naturalism
 - (C) Experimentalism
 - (D) None of the above

- (4) Who emphasized that education is a man –making process?
 - (A) Vivekananda
 - (B) Rousseau
 - (C) Dewey
 - (D) Pestalozzi

- (5) The aim of the study of Vedanta scriptures is :
 - (A) Liberation from Avidya
 - (B) Achievement of self
 - (C) Brahman realization
 - (D) All the above

- (6) Who said that ‘the aim of education should be in accordance with the feeling of international brother hood and attitude of international understanding for children’s development’?
 - (A) Mahatma Gandhi
 - (B) Tagor
 - (C) Plato
 - (D) Dewey

- (7) Which philosophy says “ Do not care to know various Theories about God and soul, do good and be good; that will take you to whatever truth there is’ -
 - (A) Sankhya
 - (B) Buddhism
 - (C) Vedanta
 - (D) All the these:

- (8) Aiming at national unity and social Progress, Social change in India is threatened by:
- (A) Joint family system
 - (B) Student unrest in school and colleges.
 - (C) Caste
 - (D) Poor Political leadership
- (9) The ultimate goal of every individual lies in his:
- (A) Building up a good society
 - (B) Building up a strong society
 - (C) Building up an intellectual society
 - (D) Building up a highly industrialized society
- (10) As a society “ Caste” is :
- (A) A closed Society
 - (B) An open Society
 - (C) A dynamic Society
 - (D) A dead Society
- (11) Which is not a characteristic of modernization?
- (A) Religious faith
 - (B) Participation
 - (C) Empathy
 - (D) None of it
- (12) Characteristic of the urban industrial family are :
- (A) Great degree of equality in roles.
 - (B) Isolation
 - (C) Separation of place of work and home
 - (D) All of the above
- (13) The word “ Caste ” is derived from:
- (A) Latin
 - (B) English
 - (C) French
 - (D) Sanskrit
- (14) What is the most effective suggestion for National intercession? :
- (A) Political in egression
 - (B) Emotional in egression
 - (C) A+B
 - (D) None of it
- (15) Who produced the formula of Behavior = (S.D.H.T.A) ?
- (A) Gutheie
 - (B) Lewin
 - (C) Tolman
 - (D) Hull

- (16) A First generation learner 'Suraj' is studying in std-xii. If he is mal adjusted than, which one the best fitting situation for him?
(A) Childhood
(B) Leterhood
(C) Ado lance
(D) Old age
- (17) Educational Psychology should provide prospective teachers with.
(A) Insights into various aspects of modern education
(B) Principles insights and attitudes as points of departure for effective teaching
(C) Research procedures by means of which to evaluate current teaching procedure.
(D) Rules of thumb to deal with everyday class-room situation.
- (18) Mal adjustment and frustration are developed in children when.
(A) They are not sending to school.
(B) Their need are ignored
(C) Their parent give them more love and affection than is due for them.
(D) They are not able to pass the examination.
- (19) Ashok becomes familiar with path way between hostels & home due to change in cognitive structure.
(A) According to lewin's theory
(B) According to Hull's theory
(C) According to Tolman's theory.
(D) According to Guthrie's theory.
- (20) A student always loves to sit on last bench. What would be the most suitable reason for it?
(A) who is very much afraid of the teacher
(B) who has come without complete home work
(C) who is not interested in study.
(D) who wants to talk with his neighbor.
- (21) You are teaching in the classroom and one student is busy reading a story book instead of attending his teacher how will deal with such case?
(A) Ask the student to leave the story book and concentrate on the subject being taught.
(B) Reprimand the student and show him the way out of the class.
(C) Purposely ignore that student.
(D) Wait for another student to complain about that student. so that you may be able to file complain against him with the principal.
- (22) A Quality of class-room communication is not satisfactory one what would be the best cause for it ?
(A) Disturbance
(B) Mass students
(C) Illiteracy of language
(D) above all
- (23) Which type of speech is required for class-room teaching?
(A) Reliable
(B) dramatical
(C) harmonious
(D) loud one

- (24) Which methods is used generally far informal education?
(A) Lecture method
(B) Experimental method
(C) Demonstration method
(D) Project method
- (25) Which one is the mostly used service available on internet?
(A) E- learning
(B) E- commerce
(C) E -mail
(D)E- banking
- (26) Which of the following do you consider as cause for a teacher's maladjustment to the profession?
(A) Limitations in his/her qualifications
(B) Not enough work to keep him/her engaged
(C) Too much of leisure and wishful thinking
(D) Poor relationship with colleagues
- (27) Which one of the following is an autonomous body related with teacher education?
(A) U.G.C.
(B) N.C.T.E.
(C) N.C.E.R.T.
(D) All of the above
- (28) If a retire college teacher wants financial assistance for project work he/she should
(A) Not do the same
(B) Approach N.C.E.R.T.
(C) Approach U.G.C.
(D) Approach the University
- (29) To make one's teaching more effective one should depend most on his
(A) Management
(B) Knowledge
(C) Feed back
(D) Teaching
- (30) Which one is the best attraction to be a teacher?
(A) The teacher is treated respected.
(B) The teacher can actuate his/her work by the students.
(C) There is much holidays in teaching.
(D)The teacher feels happiness in this profession by looking the children happy.
- (31) N.C.E.R.T has established Regional College of Education at
(A) Bhopal
(B) Ajmer
(C) Bhuvaneshwar
(D) All of them

- (32) Educational objectives such as knowledge, understanding and application comes under category of :
- (A) Functional objectives
 - (B) General objectives
 - (C) Specific objectives
 - (D) Cognitive objectives
- (33) “ Students can identified unrelated matter form given logic” – This behavioral out come is concern with the objective of
- (A) knowledge
 - (B) synthesis
 - (C) application
 - (D) analysis
- (34) Norm referenced test is used for
- (A) comparing achievement of an examinee
 - (B) measure the achievement of an examinee
 - (C) diagnosing the student’s weakness
 - (D) Evaluating the curriculum plan instruction process.
- (35) Which one of the following is not a correct statement?
- (A) Test objectivity referrers to a relation between subject and score.
 - (B) Validity is an empirical relation between test scores and criterion scores
 - (C) Reliability of a test the consistence of test score
 - (D) Reliability is a measure of variable error and Validity is the measure of constant error.
- (36) Scholastic achievement test is useful for
- (A) Evaluating the teacher
 - (B) Pre practice of board exams
 - (C) Promotion to the next class
 - (D) All of the above
- (37) Essay type questions should included in question paper because
- (A) they are useful in measurement in higher mental abilities
 - (B) they widely cover subject content
 - (C) they are easily adaptable in all school subjects
 - (D) they are easy to construct
- (38) Which one of the following is the Recall type test item?
- (A) Alternative response
 - (B) Identification
 - (C) Analogy
 - (D) Completion
- (39) Which one of the following conveys the meaning of the curriculum?
- (A) It is the organized form of subject matter.
 - (B) It includes all the Learner’s experiences in or out side school
 - (C) The curriculum is the tool in the hands of the teacher to mould his students according to objectives of education.
 - (D) All of the above

- (40) Who prepares the text book for primary school students in Gujarat?
(A) Gujarat State School Text Book Board
(B) Gujarat Council of Educational Research and Training
(C) District Institute for Educational Training
(D) Gujarat State Primary School Text Book Board
- (41) Which of the following is not true about curriculum?
(A) It addresses the personal needs of pupil.
(B) It addresses the intellectual needs of the pupil.
(C) It addresses the social needs of the pupil.
(D) None of the above
- (42) Why should we bring reforms in curriculum?
(A) Because of explosion of the knowledge.
(B) Because of increasing competition among educational institution.
(C) Because education is a life long process.
(D) None of the above.
- (43) National Curriculum Framework for Schools is developed by
(A) U.G.C.
(B) N.C.E.R.T.
(C) C.T.E.
(D) S.I.T.
- (44) Which one of the following is an objective of curriculum?
(A) To educate the child
(B) To solve the problems of the society
(C) To solve the teacher's problems
(D) None of the above
- (45) What is measured by MMPI?
(A) Intelligence
(B) Interest
(C) Aptitude
(D) Personality
- (46) Which test of Wechsler –do you suggest for pre school?
(A) WAIS
(B) WISC
(C) WPPSI
(D) WBIS
- (47) For which test do you applied 19 pictured cards and one blank card?
(A) Rorschach inkblot test
(B) Thematic Apperception Test
(C) Children's Apperception Test
(D) None of it.

- (48) If you want to measure Art –ability of a child whose test will useful for the same?
(A) K.G. Desai
(B) Anil Ambasana
(C) Mahendrika Bhatt
(D) Dusyant Shukla
- (49) Which sequence is proper in the context of test construction?
(A) Hypothesis – conclusion – data collection – data analysis
(B) Data collection –Hypothesis –Sampling -Conclusion
(C) Data collection – Data analysis –Sampling -Conclusion
(D) Choice of problem – Hypothesis –Data collection –Conclusion
- (50) Which type of test will be most useful for illiterate Adult?
(A) Verbal
(B) Non -verbal
(C) Verbal –Nonverbal
(D) All the three
- (51) Which method is expensive and tough for estimating reliability
(A) Test -Retest
(B) Parallel forms
(C) Split half
(D) Kuder -Richardson.
- (52) Which of the following is not included in SWOT analysis?
(A) Strength
(B) Opportunity
(C) Wealth
(D) Threat
- (53) What do you mean by TQM?
(A) Total quality management
(B) Total quantity management
(C) Total quality measurement
(D) Total qualitative management
- (54) Which administrative leadership system do you consider reliable for sudden arising situation?
(A) Autocratic leadership
(B) Democratize leadership
(C) Laissez Leadership
(D) Co-operative leadership
- (55) According to theory of leadership, what is necessary for an ideal leadership?
(A) Physical competency
(B) Communicative competency
(C) Moral competency
(D) Emotional competency

- (56) Whom do you consider responsible for containing Classroom administration?
 (A) Principal
 (B) Parents
 (C) Teacher
 (D) Students
- (57) Which activity is helpful to provide direct and indirect experience to students?
 (A) Excursion
 (B) Class experience
 (C) Map reading
 (D) Above all
- (58) Whom do you consider as a base for social life?
 (A) School discipline
 (B) Physical Exercise
 (C) Competition
 (D) Habit of reading
- (59) The economical condition of Mitali is very poor. She wants to earn money after 12th commerce, which type of guidance will you provide her to achieve her goal?
 (A) Educational guidance
 (B) Vocational guidance
 (C) Personal guidance
 (D) Old age guidance
- (60) Sarala is having 125 I. Q. and she fails in std: 8th, which type of counseling she requires?
 (A) Counseling for Educational back ward child
 (B) Counseling for retarded child
 (C) Counseling for gifted child
 (D) Counseling for disability child

Part -B

Question - 2 Answer each of the followings in one or Two line (11)

- 1 Who has explained ' 3 H ' with reference to the Education
- 2 In which year Employment Guarantee Plan was started?
- 3 Enlist any two non verbal test of Intelligence used to measure I.Q. of these students of std. 10.
- 4 What would be type of communication when a play is being telecast on Door- Darshan?
- 5 Binita having malnutrition what would be her main adjustment problems?
- 6 According to you , which is the most important objective of teacher training
- 7 At primary level (P.T.C.).
- 8 Illustrate two situations in which on demand exams can be preferred?
- 9 Suggest the most important reform for present B.Ed Course.
- 10 Enlist any two non verbal test of intelligence used to measure I.Q. of the students of Std .X
- 9 What do mean by administration?
- 11 Why one should provide guidance at secondary level?

Question - 3 Answer each of the followings in three to four lines (14)

- 1 Clarify the term ' Jain' with it's meaning.
- 2 What is Equality of Education?
- 3 According to Tolman "Every behaviors is purposive and an associated and cognitive"
How?
- 4 "Open examination is the best solution to make examinee free from mental stress" –Do you agree? Justify
- 5 Enlist any four important criteria for a internal evaluation of a text book.
- 6 Why does pilot testing is necessary far the construction of standardized test? How pilot testing will be used in test construction?
- 7 It some one offers you to be administrator or manager which one will you prefer? Justify it. Self evaluation.

Question - 4 Answer each of the followings in Short (15)

- 1 How will you applied information and communication Technology in your class-room To make the teaching effective
- 2 "Defects in supervision of practice teaching at Teacher Education Institute lead to deterioration of the quality of teachers" – Do you agreed with it? Justify.
- 3 Clarify the concept of Guidance and mention scope of it.

