| 2023  |         |
|---|---------|
| (CBCS)  |         |
| (5th Semester)  |         |
| EDUCATION   |         |
| FIFTH PAPER   |         |
| (Introduction to Research Methodology and Statistics in Education | on )    |
| ( Revised )   |         |
| Full Marks : 75   | 6       |
| Time: 3 hours   |         |
| The figures in the margin indicate full marks for the questions   |         |
| ( SECTION : A-OBJECTIVE )   |         |
| ( Marks : 10 )  |         |
| Tick (✓) the correct answer in the brackets provided:             | 1×10=10 |
| 1. Action research is a research                                  |         |
| (a) to investigate and solve an immediate problem ( )             |         |
| (b) done only by experts ( )                                      |         |
| (c) to formulate new theories ( )                                 |         |
| (d) similar to quantitative research ( )                          |         |
| 2. A researcher needs to review the existing literature           |         |
| (a) to formulate new theories ( )                                 |         |
| (b) to copy information from books ( )                            |         |
| (c) to find out what is already known about topic under study (   | )       |
| (d) to solve the problem ( )                                      |         |
|   |         |

| 3. | Ou        | t of the following, which is not a probability sample?                            |
|----|-----------|---|
|    | (a)       | Cluster sampling ( )  |
|    | (b)       | Stratified sampling ( )   |
|    | (c)       | Quota sampling ( )  |
|    | (d)       | Simple random sampling ( )  |
| 4. | In p      | purposive sampling, items are selected according to                               |
|    | (a)       | personal judgement ( )  |
|    | (b)       | universal judgement ( )   |
|    | (c)       | law of certainty ( )  |
|    | (d)       | law of probability ( )  |
| 5. | Wh<br>app | ich of the following permits access to respondents who are not easily proachable? |
|    | (a)       | Interview ( )   |
|    | (b)       | Psychological test ( )  |
|    | (c)       | Observation ( )   |
|    | (d)       | Questionnaire ( )   |
| 6. | A te      | est that determines a person's preferences for specific fields or activities is   |
|    | (a)       | achievement test ( )  |
|    | (b)       | interest inventories ( )  |
|    | (c)       | aptitude test ( )   |
|    | (d)       | intelligence test ( )   |
|    |           |   |

| 7.  | The score which occurs the most frequent is called                                       |
|-----|--|
|     | (a) mean ( )   |
|     | (b) median ( )   |
|     | (c) mode ( )   |
|     | (d) range ( )  |
| 8.  | Inferential statistics is also sometimes called  |
|     | (a) sample statistics ( )  |
|     | (b) descriptive statistics ( )   |
|     | (c) theoretical statistics ( )   |
|     | (d) interest inventories ( )   |
| 9.  | The average which represents all the scores made by mean, median and mode is             |
|     | (a) measures of standard deviation ( )   |
|     | (b) measures of central tendency ( )   |
|     | (c) measures of quartile deviation ( )   |
|     | (d) measures of average deviation ( )  |
| 10. | The 'scatter' or 'spread' of the separate scores around their central tendency is called |
|     | (a) measures of central tendency ( )   |
|     | (b) measures of variability ( )  |
|     | (c) measures of correlation ( )  |
|     | (d) measures of normal distribution ( )  |

# ( SECTION : B—SHORT ANSWERS )

( Marks: 15)

Write briefly on the following:

 $3 \times 5 = 15$ 

1. Concept of applied research

UNIT-I

OR

2. Fundamental research

UNIT-II

3. Simple random sampling

OR

4. Stratified random sampling

UNIT-III

5. Aptitude test

OR

6. Observation as a tool of data collection

UNIT-IV

7. Two types of mode

OR

8. Concept of median and its uses

#### UNIT-V

| of correlation |    |
|----------------|----|
| . Concept      | OR |
| S              |    |

Uses of range

# ( SECTION : C—DESCRIPTIVE )

( Marks: 50)

UNIT Answer the following:

 $10 \times 5 = 50$ 

10 What do you mean by educational research? Elaborate the different steps involved in educational research. H

OR

Describe the scope of educational research. Ŕ

10

#### UNIT-II

What is population? Write the advantages and disadvantages of sampling. 3+7=104+6=10o types two Explain design'? 8 sampling non-probability sampling design. 'non-probability What is က် 4.

## UNIT-III

3+7=10Explain questionnaire as a tool of data collection. Mention its merits and demerits. 'n

#### OR

2+8=10ö types Explain two tests'? 'psychological ģ What do you mean psychological tests. ø.

10 /19

[Contd.

3+7=10 7. Explain the concept of statistics. Discuss, in detail, the significance of statistics.

#### OR

8. Define mean and mention its uses. Compute mean from the following distribution of scores/grouped data:

| ,      | -     | -     | ĸſ    | ۰     | ĸ     | œ     | 10    | 9     | 4     | 7     | 0     | 1     | N = 57 |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| Scores | 57-59 | 54-56 | 51-53 | 48-50 | 45-47 | 42-44 | 39-41 | 36–38 | 33-35 | 30-32 | 27-29 | 24–26 |        |

#### UNIT-V

3+7=109. What are the uses of average deviation? Compute average deviation from the following set of scores:

| f      | 2     | ıc    | 80    | 11    | 13    | 20    | 14    | 11    | 6     | 4     | ဇ     | N = 100 |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---------|
| Scores | 72-74 | 69–71 | 89-99 | 63–65 | 60-62 | 57-59 | 54-56 | 51–53 | 48-50 | 45-47 | 42-44 |         |

#### OR S

2+(6+2)=10What is the product moment method of correlation coefficient? Calculate the coefficient of correlation between the height and weight of individuals from the table given below and interpret your result: 9

|          |            | * *               |  |
|----------|------------|-------------------|--|
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|          | 155        | 29                | G  |
|          | 135        | 89                | Ć4,  |
|          | 140        | 69                | প্র  |
|          | 165        | 70                | Q  |
|          | 160        | 7.1               | O  |
|          | 145        | 72                | В  |
|          | 150        | 73                | A  |
|          | Weight     | Height            | Individuals                                    |
| =(7+9)+7 | u resuir : | and micropiet you | clabic given below and mitchibict your result. |

#### 2023

(CBCS

(5th Semester)

## EDUCATION

FIFTH PAPER

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(Revised)

Full Marks: 75

Time: 3 hours

The figures in the margin indicate full marks for the questions

# ( SECTION : A—OBJECTIVE )

( Marks: 10 )

 $1 \times 10 = 10$ Tick (✓) the correct answer in the brackets provided: Action research is a research

- to investigate and solve an immediate problem
- done only by experts (q)
- to formulate new theories (c)
- similar to quantitative research (g
- A researcher needs to review the existing literature ri
- to formulate new theories (a)
- to copy information from books (q)
- to find out what is already known about topic under study <u>ပ</u>
- to solve the problem (g

| Out of the following, which is not a probability sample? | ( ) Bu               | ( ) guild               | ( ) 8              | sampling (so) (so)       | In purposive sampling, items are selected according to | aent g spolegables of West revest of as 1885 a | ( )                     |                      | 3)                     | Which of the following permits access to respondents who are not easily approachable? |                 | 1 ) 3 5 8 8 8            |                   | ( )                 | A test that determines a person's preferences for specific fold. | ( )                  |                          |                       |                       |
|--|----------------------|-------------------------|--------------------|--------------------------|--|--|-------------------------|----------------------|------------------------|---|-----------------|--------------------------|-------------------|---------------------|--|----------------------|--------------------------|-----------------------|-----------------------|
| 3. Out of the following, which                           | (a) Cluster sampling | (b) Stratified sampling | (c) Quota sampling | (d) Simple random sampli | 4. In purposive sampling, ites                         | (a) personal judgement                         | (b) universal judgement | (c) law of certainty | (d) law of probability | 5. Which of the following permapproachable?   | (a) Interview ( | (b) Psychological test ( | (c) Observation ( | (d) Questionnaire ( | A test that determines a persor                                  | (a) achievement test | (b) interest inventories | (c) aptitude test ( ) | (d) intelligence test |

|  |          |          |         |          |  |                       |                        |                    |                        | y mean, median and   |                                |                              |                                |                               | around their central                                |                              |                         |                         |                                 | [ Contd. |
|--|----------|----------|---------|----------|--|-----------------------|------------------------|--------------------|------------------------|--|--------------------------------|------------------------------|--------------------------------|-------------------------------|---|------------------------------|-------------------------|-------------------------|---------------------------------|----------|
| requent is called                              |          |          |         |          | mes called                                     |                       |                        |                    |                        | he scores made b   | ( ) u                          | · ·                          | ( ) τ                          | ( ) ι                         | separate scores                                     | ·                            | _                       | · ·                     | tion ( )                        | က        |
| score which occurs the most frequent is called | <u> </u> | · ·      | . ( )   | ( )      | nferential statistics is also sometimes called | sample statistics ( ) | descriptive statistics | tical statistics ( | interest inventories ( | average which represents all the scores made by mean, median and<br>e is | measures of standard deviation | measures of central tendency | measures of quartile deviation | measures of average deviation | The 'scatter' or 'spread' of the tendency is called | measures of central tendency | measures of variability | measures of correlation | measures of normal distribution |          |
| ne score w                                     | () mean  | ) median | c) mode | d) range | nferential                                     | (a) sample            | (b) descrip            | (c) theoretical    | (d) interes            | The averag<br>mode is  | (a) meası                      | (b) meast                    | (c) meas                       | (d) meas                      | . The 'scatter'<br>tendency is c                    | (a) meas                     | (b) mea                 | (c) mea                 | (q) mea                         | 19       |

# ( SECTION: B—SHORT ANSWERS)

(Marks: 15)

 $3^{x}5=1_{5}$ 

Write briefly on the following :

UNIT-I

1. Concept of applied research

OR

2. Fundamental research

3. Simple random sampling

OR

4. Stratified random sampling

UNIT

5. Aptitude test Q R 6. Observation as a tool of data collection

UNIT-IV

7. Two types of mode

OR S

8. Concept of median and its uses

OR

Uses of range

10

Concept of correlation

6

# ( SECTION : C-DESCRIPTIVE

( Marks: 50)

What do you mean by educational research? Elaborate the different steps UNIT-I Answer the following:

10×5=50

10 involved in educational research. OR O i

Describe the scope of educational research. ri

10

#### UNIT-II

What is population? Write the advantages and disadvantages of sampling. 3+7=104+6=10types two Explain design'? 9 sampling non-probability sampling design. 'non-probability What 4. es.

## UNIT-III

3+7=10Explain questionnaire as a tool of data collection. Mention its merits and 9 demerits. ĸ.

[ Contd. /19

2+8=10

'psychological tests'? Explain two types of

What do you mean by

ė

psychological tests.

#### UNIT-IV

7. Explain the concept of statistics. Discuss, in detail, the significance  $_{
m of}$ 

3+7=1

8. Define mean and mention its uses. Compute mean from the following (2+2)+6=10

| mon th                          |       | Š     |       |       |       |       |             |       |       |       |       |       |   |
|---------------------------------|-------|-------|-------|-------|-------|-------|-------------|-------|-------|-------|-------|-------|---|
| f f                             | 1     | 7.    | Ŋ     | 6     | ທ     | 000   | 10 TW 52.48 | 2 4   |       | + 1   | ٠ ،   | o -   | • |
| of scores/grouped data : Scores | 57-59 | 54-56 | 51–53 | 48-50 | 45-47 | 42-44 | 39-41       | 36-38 | 33-35 | 30-32 | 27-29 | 24-26 |   |

N = 57

9. What are the uses of average deviation? Compute average deviation from the following set of scores:

| £      | 7     | S     | 00    | 11    | 13    | 20    | 14    | 11    | 6     | 4     | e     |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Scores | 72-74 | 69–71 | 89-99 | 63-65 | 60-62 | 57-59 | 54-56 | 51-53 | 48-50 | 45-47 | 42-44 |

#### OR

N = 100

2+(6+2)=1010. What is the product moment method of correlation coefficient? Calculate the coefficient of correlation between the height and weight of individuals from the table given below and interpret your result:

|                 | Weight      | 150 | 145 | 160 | 165 | 140 | 135 | 155 | 125 |  |
|-----------------|-------------|-----|-----|-----|-----|-----|-----|-----|-----|--|
| med and men num | Height      | 73  | 72  | 71  | 70  | 69  | 89  | 29  | 99  |  |
| B               | Individuals | A   | В   | O   | D   | E   | A   | Ö   | Н   |  |

4

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#### 2023

( CBCS )

(5th Semester)

## EDUCATION

FIFTH PAPER

# (Introduction to Research Methodology and Statistics in Education)

(Revised)

Full Marks: 75

Time: 3 hours

The figures in the margin indicate full marks for the questions

# (SECTION: A—OBJECTIVE)

( Marks: 10)

Tick ( $\checkmark$ ) the correct answer in the brackets provided :

- 1. Action research is a research
- to investigate and solve an immediate problem
- (b) done only by experts ( )
- (c) to formulate new theories ( )
- similar to quantitative research (g)
- A researcher needs to review the existing literature to formulate new theories Ŕ
- b) to copy information from books (
- to find out what is already known about topic under study 0
  - to solve the problem (g

[ Contd.

77

/19

| 7. The score which occurs the most frequent is called | (a) mean ( ) | (b) median ( ) | (c) mode ( ) | (d) range ( ) | 8. Inferential statistics is also sometimes called | (a) sample statistics ( ) | (b) descriptive statistics ( ) | (c) theoretical statistics ( ) | (d) interest inventories ( ) | 9. The average which represents all the scores made by mean, median and mode is | (a) measures of standard deviation ( ) | (b) measures of central tendency ( ) | (c) measures of quartile deviation ( ) | (d) measures of average deviation ( ) | 10. The 'scatter' or 'spread' of the separate scores around their central tendency is called | (a) measures of central tendency ( ) | (b) measures of variability ( ) | (c) measures of correlation ( ) | (d) measures of normal distribution ( ) |
|---|--------------|----------------|--------------|---------------|--|---------------------------|--------------------------------|--------------------------------|------------------------------|---|--|--------------------------------------|--|---------------------------------------|--|--------------------------------------|---------------------------------|---------------------------------|---|
|---|--------------|----------------|--------------|---------------|--|---------------------------|--------------------------------|--------------------------------|------------------------------|---|--|--------------------------------------|--|---------------------------------------|--|--------------------------------------|---------------------------------|---------------------------------|---|

(Marks: 15)

Write briefly on the following:

UNIT-I

3×5=15

1. Concept of applied research

80

2. Fundamental research

UNIT-II

OR

3. Simple random sampling

4. Stratified random sampling

UNIT-III

OR

5. Aptitude test

6. Observation as a tool of data collection

7. Two types of mode

UNIT-IV

8. Concept of median and its uses

80

#### UNIT\_V

9. Concept of correlation

10. Uses of range

# ( SECTION : C-DESCRIPTIVE

( Marks: 50 )

UNIT-I Answer the following:

 $10 \times 5 = 50$ 

What do you mean by educational research? Elaborate the different steps involved in educational research. H

10

10

2. Describe the scope of educational research.

9

## UNIT—II

3+7=104+6=10 o What is population? Write the advantages and disadvantages of sampling. types two Explain design'? OR sampling non-probability sampling design. 'non-probability What 4. က်

## UNIT—III

3+7=10Explain questionnaire as a tool of data collection. Mention its merits and OR O demerits. 'n

2+8=10 Explain two types 'psychological tests'? þ 6. What do you mean psychological tests.

/19

[ Contd.

3+7=107. Explain the concept of statistics. Discuss, in detail, the significance of statistics.

OR S

(2+2)+6=10uses. Compute mean from the following distribution of scores/grouped data: Define mean and mention its ø

Scores

57-59

54-56

51-53

48-50

45-47

42-44

39-41 10

36-38

33-35

30-32 7

27–29 0

24–26

N = 57

## UNIT-V

3+7=10What are the uses of average deviation? Compute average deviation from the following set of scores: 6

| J      | 7     | S     | 80    | 11    | 13    | 20    | 14    | 11    | 6     | 4     | 3     | N = 100 |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---------|
| Scores | 72-74 | 69-71 | 89-99 | 63-65 | 60-62 | 57-59 | 54-56 | 51–53 | 48-50 | 45-47 | 42-44 |         |

#### OR OR

2+(6+2)=10the coefficient of correlation between the height and weight of individuals What is the product moment method of correlation coefficient? Calculate from the table given below and interpret your result : 10

| Weight      | 150 | 145 | 160 | 165 | 140 | 135 | 155 | 125 |
|-------------|-----|-----|-----|-----|-----|-----|-----|-----|
| Height      | 73  | 72  | 71  | 70  | 69  | 89  | 29  | 99  |
| Individuals | Ą   | В   | O   | D   | स्र | FT. | Ö   | Н   |

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2023

(CBCS)

(5th Semester)

## EDUCATION

SIXTH PAPER

# (Early Childhood Care and Education)

(Revised)

Full Marks: 75

Time: 3 hours

The figures in the margin indicate full marks for the questions

( SECTION : A—OBJECTIVE )

( Marks: 10)

 $1 \times 10 = 10$ Tick (✓) the correct answer in the brackets provided:

1. According to NEP, 2020, ECCE includes

- (a) early detection programme (
- (b) early stimulation programme (
- (c) early interaction programme (
- (d) early coordination programme
- Indian Council for Child Welfare, New Delhi was formed in 6
- (a) 1952 (
- (b) 1953 (
- (c) 1962 ( )
- (d) 1963 (

|    | (a)         | teacher's garden                         |               |               |  |
|----|-------------|--|---------------|---------------|--|
|    | (q)         | girl's garden                            | _             | _             |  |
|    | (c)         | boy's garden                             | _             | _             |  |
|    | (q)         | children's garden                        |               | _             |  |
| 4. | The<br>per: | foundations of hese<br>sonality of human | alth,<br>beir | lang<br>igs a | The foundations of health, language, capacity to learn, self-confidence and personality of human beings are laid down in the first |
|    | (a)         | three years of life                      |               | _             |  |
|    | (q)         | four years of life                       |               | J             |  |
|    | (c)         | five years of life                       |               | _             |  |
|    | (g)         | six years of life                        |               |               |  |
| ió | Boc         | Books, pictures, radio and TV            | and           | TV            | are necessary for  |
|    | (a)         | physical development                     | nent          |               | ( )  |
|    | (q)         | emotional development                    | men           | Ţ.            |  |
|    | (c)         | language development                     | ment          |               |  |
|    | (q)         | university development                   | omer          | ı,            | ( )  |
| 9  | Wh          | ich bank offers sp                       | ecial         | sch           | Which bank offers special scheme for funding day care centres?   |
|    | (a)         | HDFC Bank                                | _             | _             |  |
|    | (q)         | Bharatiya Mahila Bank                    | Вап           | ¥             | ( )  |
|    | (0)         | Reserve Bank of India                    | India         | ٠             |  |
|    | (q)         | State Bank of India                      | lia           |               |  |
| 7. |             | medium of instruc                        | tion          | in th         | The medium of instruction in the early childhood programmes should be in   |
|    | (a)         | mother tongue                            | _             | ^             |  |
|    | (q)         | English (                                | _             |               |  |
|    | (c)         | Hindi ( )                                |               |               |  |
|    | (p)         | Sanskrit (                               | _             |               |  |
|    |             |  |               |               |  |

3. Kindergarten means

| Contd.

8

/21

| ထံ | <ol> <li>Which planning is with regard to the learning experiences of the children,<br/>equipment, teaching and learning material, budget for basic infrastructure<br/>and others?</li> </ol> |     |
|----|---|-----|
|    | (a) Long-term planning ( )  (b) Short-term planning ( )   |     |
|    | (c) Weekly planning ( )   |     |
|    | (d) Daily planning ( )  |     |
| 6  | 9. The teaching-learning process in an ECC centre must be based on  |     |
|    | (a) understanding ( )   |     |
|    | (b) play-way activities ( )   |     |
|    | (c) lecture method ( )  |     |
|    | (d) project method ( )  |     |
| 2  | 10. The advantage of low cost playing materials is  |     |
|    | (a) no cost ( )   |     |
|    | (b) high cost ( )   |     |
|    | (c) cheapness ( )   |     |
|    | (d) unavailability of resources ( )   |     |
|    | ( SECTION: B—SHORT ANSWERS)   |     |
|    | ( Marks: 15 )   |     |
| ≥  | Write briefly on the following:   | 15  |
|    | UNIT—I  |     |
|    | 1. Recommendations of Yashpal Committee on ECCE   |     |
|    | OR  |     |
|    | 2. Objectives of ECCE   |     |
|    | UniT—II   |     |
|    | 3. Importance of Kindergarten   |     |
|    | OR  |     |
|    | 4. Objectives of Anganwadi  |     |
|    | /21 3   | td. |

#### UNIT-III

5. Physical facilities of ECCE centres

#### OR S

Maintenance of simple cash book at ECCE centres ø.

## UNIT-IV

- 7. Preparation of long-term planning for ECCE centres OR S
- Preparation of play materials out of waste materials œ.

#### UNIT-V

9. Learning corners in ECCE centres

#### g

10. Significance of plays without material

# (SECTION: C-DESCRIPTIVE)

( Marks: 50)

Answer the following:

UNIT—I

10×5=50

- 3+7=10the ECCE? Explain term recommendations of NPE, 1986 on ECCE. the þ 8 understand you မှ H
- Discuss, in detail, the role and functions of Central Social Welfare Board, Ŕ

10

## UNIT-II

Explain the concept and importance of Nursery schools. 80 ю.

3+7=10

10 Write, in detail, the nature and characteristics of Montessori schools. 4.

[ Contd. /21