STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI 600 086 (For candidates admitted during the academic year 2023 – 2024)

M.Sc., DEGREE EXAMINATION, NOVEMBER 2023 PSYCHOLOGY FIRST SEMESTER

COURSE : CORE

PAPER : PSYCHOMETRY SUBJECT CODE : 23PY/PC/PM14

TIME : 3 HOURS MAX. MARKS: 100

| Q. No. | SECTION A $(4 \times 5 = 20 \text{ marks})$ | CO | KL |
|---------|---|-----|------|
| | Answer all the questions not exceeding 300 words | | |
| 1. | a) What are psychometric tests, and what is their main | CO1 | K1 |
| | purpose? | | |
| | (or) | | |
| | b) Explain any three types of reliability. | | |
| 2. | a) Briefly, what is the historical context of psychometric | CO1 | K1 |
| | tests? | | |
| | (or) | | |
| 2 | b) Explain the key steps in constructing a psychometric test. | 001 | 17.0 |
| 3. | a) Why is scaling important in psychometric test | CO1 | K2 |
| | development? | | |
| | (or) | | |
| 4 | b) Describe the process of standardizing tests. | CO1 | IZO. |
| 4. | a) Define norms. | CO1 | K2 |
| | (or) b) What are some practical challenges in constructing | | |
| | personality inventories? | | |
| Q. No. | SECTION B $(4 \times 10 = 40 \text{ marks})$ | CO | KL |
| Q. 110. | Answer all the questions not exceeding 700 words | | IXL |
| 5. | a) Imagine you are designing a school examination. Apply | CO2 | K3 |
| J. | the concept of item arrangement to organize the questions | 002 | 113 |
| | effectively. Explain the rationale behind your arrangement. | | |
| | (or) | | |
| | b) Design a set of multiple-choice items for assessing mood. | | |
| | Explain your item selection. | | |
| | | | |
| 6. | a) Illustrate clear item-writing guidelines for a brief personality | CO2 | K3 |
| | assessment to measure traits like extroversion and introversion. | | |
| | (or) | | |
| | b) Discuss strategies to minimize response sets in | | |
| | personality inventories. | | |
| 7. | a) Justify the need for validity and reliability for a test and | CO3 | K4 |
| | analyze factors affecting validity and reliability estimation. | | |
| | (or) | | |
| | b) Analyse the challenges and potential pitfalls associated | | |
| | with factors like test length, sample size, and item format. | | |

| 8. | a) Critically assess the item analysis process. | CO3 | K4 |
|--------|--|-----|----|
| | (or) | | |
| | b) Analyze the process of selecting items after item analysis. | | |
| | Provide examples of when certain items might need to be | | |
| | rewritten or excluded from a test. | | |
| Q. No. | SECTION C $(2 \times 20 = 40 \text{ marks})$ | CO | KL |
| | Answer any 2 questions not exceeding 1200 words | | |
| 9. | a) Critically evaluate various item types and propose | CO4 | K5 |
| | guidelines for selecting appropriate item types in an aptitude test. | | |
| | b) Develop a detailed plan for creating a new psychometric | | |
| | test designed to assess emotional intelligence in adolescents. | CO5 | K6 |
| 10. | a) Evaluate the practical utility and limitations of objective | CO4 | K5 |
| | tests in assessing personality and motivation. | | |
| | b) Imagine you are tasked with designing a projective test to | | |
| | assess personality traits. Provide a comprehensive outline | CO5 | |
| | of how you would create this test and its administration | | K6 |
| | procedures. | | |
| 11. | a) Evaluate the influence of ability and achievement on objective | CO4 | K5 |
| | test scores and formulate strategies to eliminate the impact. | | |
| | b) Hypothesize the impact of item order and arrangement on | | |
| | test performance and reliability. | CO5 | K6 |
| 12. | a) Appraise the different scaling methods for construction of | CO4 | K5 |
| | attitude tests. | | |
| | b) Develop a framework for constructing a psychometric test | | |
| | that assesses attitudes towards environmental | CO5 | K6 |
| | sustainability. | | |
