

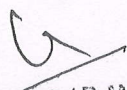
# TUMKUR UNIVERSITY

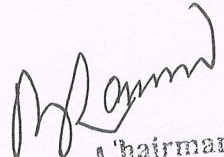
Department of Studies and Research in Social work

Ph.D. Entrance Examination, March 2023

## ANSWER KEYS

|    |   |    |   |    |   |     |   |
|----|---|----|---|----|---|-----|---|
| 1  | D | 26 | A | 51 | B | 76  | C |
| 2  | C | 27 | D | 52 | A | 77  | A |
| 3  | C | 28 | D | 53 | C | 78  | D |
| 4  | D | 29 | B | 54 | A | 79  | B |
| 5  | B | 30 | B | 55 | A | 80  | A |
| 6  | A | 31 | C | 56 | B | 81  | A |
| 7  | C | 32 | C | 57 | A | 82  | D |
| 8  | C | 33 | A | 58 | D | 83  | C |
| 9  | C | 34 | B | 59 | A | 84  | A |
| 10 | C | 35 | C | 60 | C | 85  | D |
| 11 | C | 36 | C | 61 | A | 86  | B |
| 12 | C | 37 | B | 62 | C | 87  | B |
| 13 | C | 38 | D | 63 | B | 88  | D |
| 14 | D | 39 | B | 64 | C | 89  | A |
| 15 | D | 40 | D | 65 | A | 90  | C |
| 16 | D | 41 | A | 66 | C | 91  | B |
| 17 | C | 42 | B | 67 | D | 92  | A |
| 18 | A | 43 | A | 68 | A | 93  | A |
| 19 | D | 44 | C | 69 | B | 94  | B |
| 20 | B | 45 | C | 70 | C | 95  | D |
| 21 | C | 46 | B | 71 | B | 96  | B |
| 22 | D | 47 | A | 72 | C | 97  | B |
| 23 | C | 48 | D | 73 | C | 98  | A |
| 24 | A | 49 | D | 74 | A | 99  | D |
| 25 | C | 50 | B | 75 | C | 100 | B |

  
CHAIRMAN  
Department of Studies &  
Research in Social Work  
Tumkur University,  
TUMKUR

  
Chairman  
Board of Examination in Social Work  
Department of Post Graduate Studies  
and Research in Social Work  
Tumkur University, Tumkur

(Ph.D.)

**PhD Entrance Test, Subject: Biotechnology, Date: 24/03/2023**

**Key Answers**

|    |   |    |   |    |   |    |   |     |   |
|----|---|----|---|----|---|----|---|-----|---|
| 1  | c | 21 | b | 41 | c | 61 | c | 81  | c |
| 2  | c | 22 | c | 42 | a | 62 | b | 82  | c |
| 3  | d | 23 | d | 43 | a | 63 | b | 83  | d |
| 4  | b | 24 | c | 44 | a | 64 | d | 84  | b |
| 5  | a | 25 | b | 45 | d | 65 | a | 85  | b |
| 6  | d | 26 | b | 46 | a | 66 | d | 86  | c |
| 7  | a | 27 | b | 47 | d | 67 | b | 87  | a |
| 8  | a | 28 | b | 48 | d | 68 | c | 88  | b |
| 9  | d | 29 | d | 49 | d | 69 | a | 89  | c |
| 10 | b | 30 | a | 50 | a | 70 | a | 90  | a |
| 11 | b | 31 | a | 51 | a | 71 | a | 91  | d |
| 12 | b | 32 | a | 52 | c | 72 | c | 92  | b |
| 13 | c | 33 | d | 53 | a | 73 | c | 93  | d |
| 14 | c | 34 | b | 54 | b | 74 | d | 94  | d |
| 15 | a | 35 | d | 55 | d | 75 | d | 95  | c |
| 16 | d | 36 | c | 56 | c | 76 | b | 96  | b |
| 17 | c | 37 | b | 57 | c | 77 | a | 97  | d |
| 18 | d | 38 | d | 58 | a | 78 | c | 98  | a |
| 19 | b | 39 | c | 59 | c | 79 | a | 99  | c |
| 20 | b | 40 | b | 60 | b | 80 | b | 100 | d |

PHYSICS

Registration Number:

Name of the Candidate :

Name of the Examination Center:

Name of the Subject :

CANDIDATE'S SIGNATURE

INVIGILATOR'S SIGNATURE

OMR Sheet No.



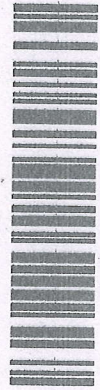
TUT00587

## Subject

- |                                        |                                                           |                                             |                                            |
|----------------------------------------|-----------------------------------------------------------|---------------------------------------------|--------------------------------------------|
| 1. Biochemistry <input type="radio"/>  | 6. English <input type="radio"/>                          | 11. Management <input type="radio"/>        | 16. Social Work <input type="radio"/>      |
| 2. Biotechnology <input type="radio"/> | 7. Environmental Science <input type="radio"/>            | 12. Mathematics <input type="radio"/>       | 17. Sociology <input type="radio"/>        |
| 3. Chemistry <input type="radio"/>     | 8. History and Archaeology <input type="radio"/>          | 13. Microbiology <input type="radio"/>      | 18. Zoology <input type="radio"/>          |
| 4. Commerce <input type="radio"/>      | 9. Kannada <input type="radio"/>                          | 14. Physics <input type="radio"/>           | 19. Computer Science <input type="radio"/> |
| 5. Economics <input type="radio"/>     | 10. Library and Information Science <input type="radio"/> | 15. Political Science <input type="radio"/> |                                            |

| Qn. No. | Answers | Qn. No. | Answers | Qn. No. | Answers | Qn. No. | Answers | Qn. No. | Answers |
|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1       | A B C D | 21      | A B C D | 41      | A B C D | 61      | A B C D | 81      | A B C D |
| 2       | A B C D | 22      | A B C D | 42      | A B C D | 62      | A B C D | 82      | A B C D |
| 3       | A B C D | 23      | A B C D | 43      | A B C D | 63      | A B C D | 83      | A B C D |
| 4       | A B C D | 24      | A B C D | 44      | A B C D | 64      | A B C D | 84      | A B C D |
| 5       | A B C D | 25      | A B C D | 45      | A B C D | 65      | A B C D | 85      | A B C D |
| 6       | A B C D | 26      | A B C D | 46      | A B C D | 66      | A B C D | 86      | A B C D |
| 7       | A B C D | 27      | A B C D | 47      | A B C D | 67      | A B C D | 87      | A B C D |
| 8       | A B C D | 28      | A B C D | 48      | A B C D | 68      | A B C D | 88      | A B C D |
| 9       | A B C D | 29      | A B C D | 49      | A B C D | 69      | A B C D | 89      | A B C D |
| 10      | A B C D | 30      | A B C D | 50      | A B C D | 70      | A B C D | 90      | A B C D |
| 11      | A B C D | 31      | A B C D | 51      | A B C D | 71      | A B C D | 91      | A B C D |
| 12      | A B C D | 32      | A B C D | 52      | A B C D | 72      | A B C D | 92      | A B C D |
| 13      | A B C D | 33      | A B C D | 53      | A B C D | 73      | A B C D | 93      | A B C D |
| 14      | A B C D | 34      | A B C D | 54      | A B C D | 74      | A B C D | 94      | A B C D |
| 15      | A B C D | 35      | A B C D | 55      | A B C D | 75      | A B C D | 95      | A B C D |
| 16      | A B C D | 36      | A B C D | 56      | A B C D | 76      | A B C D | 96      | A B C D |
| 17      | A B C D | 37      | A B C D | 57      | A B C D | 77      | A B C D | 97      | A B C D |
| 18      | A B C D | 38      | A B C D | 58      | A B C D | 78      | A B C D | 98      | A B C D |
| 19      | A B C D | 39      | A B C D | 59      | A B C D | 79      | A B C D | 99      | A B C D |
| 20      | A B C D | 40      | A B C D | 60      | A B C D | 80      | A B C D | 100     | A B C D |

OMR Sheet No.



Marks Awarded

Evaluator &amp; Signature

1.

2.

PHD, ENTRANCE EXAMINATION, SUBJECT: MICROBIOLOGY, DATE: 24/03/2023

KEY ANSWERS

|    |   |    |   |    |   |    |   |     |   |
|----|---|----|---|----|---|----|---|-----|---|
| 1  | a | 21 | d | 41 | d | 61 | b | 81  | a |
| 2  | b | 22 | a | 42 | b | 62 | b | 82  | b |
| 3  | c | 23 | b | 43 | d | 63 | b | 83  | b |
| 4  | c | 24 | b | 44 | a | 64 | b | 84  | b |
| 5  | a | 25 | c | 45 | b | 65 | d | 85  | a |
| 6  | c | 26 | d | 46 | c | 66 | b | 86  | b |
| 7  | a | 27 | a | 47 | a | 67 | c | 87  | a |
| 8  | b | 28 | c | 48 | a | 68 | b | 88  | d |
| 9  | a | 29 | b | 49 | b | 69 | a | 89  | c |
| 10 | b | 30 | b | 50 | a | 70 | c | 90  | a |
| 11 | c | 31 | c | 51 | c | 71 | b | 91  | c |
| 12 | a | 32 | d | 52 | a | 72 | d | 92  | a |
| 13 | b | 33 | a | 53 | c | 73 | a | 93  | c |
| 14 | c | 34 | a | 54 | b | 74 | a | 94  | a |
| 15 | a | 35 | c | 55 | a | 75 | b | 95  | c |
| 16 | d | 36 | c | 56 | b | 76 | d | 96  | d |
| 17 | c | 37 | d | 57 | c | 77 | d | 97  | c |
| 18 | b | 38 | d | 58 | d | 78 | c | 98  | a |
| 19 | b | 39 | a | 59 | a | 79 | a | 99  | b |
| 20 | b | 40 | a | 60 | b | 80 | d | 100 | c |

ಶಿಕ್ಷಣ - ವಿವರ: ಡಿ. ಪ್ರಸಾದ್ ಮೊರೆ - 2023  
 ಉತ್ತರಗಳು - ಸರ್ವ - 1

|    |    |    |    |     |    |
|----|----|----|----|-----|----|
| 1  | ಎ  | 37 | ಬಿ | 73  | ಬಿ |
| 2  | ಸಿ | 38 | ಎ  | 74  | ಬಿ |
| 3  | ಬಿ | 39 | ಸಿ | 75  | ಎ  |
| 4  | ಡಿ | 40 | ಡಿ | 76  | ಎ  |
| 5  | ಬಿ | 41 | ಎ  | 77  | ಸಿ |
| 6  | ಎ  | 42 | ಎ  | 78  | ಸಿ |
| 7  | ಎ  | 43 | ಬಿ | 79  | ಬಿ |
| 8  | ಸಿ | 44 | ಎ  | 80  | ಎ  |
| 9  | ಎ  | 45 | ಸಿ | 81  | ಬಿ |
| 10 | ಡಿ | 46 | ಎ  | 82  | ಎ  |
| 11 | ಬಿ | 47 | ಬಿ | 83  | ಬಿ |
| 12 | ಸಿ | 48 | ಸಿ | 84  | ಬಿ |
| 13 | ಎ  | 49 | ಎ  | 85  | ಬಿ |
| 14 | ಬಿ | 50 | ಬಿ | 86  | ಬಿ |
| 15 | ಡಿ | 51 | ಸಿ | 87  | ಬಿ |
| 16 | ಎ  | 52 | ಎ  | 88  | ಬಿ |
| 17 | ಬಿ | 53 | ಎ  | 89  | ಸಿ |
| 18 | ಡಿ | 54 | ಎ  | 90  | ಸಿ |
| 19 | ಎ  | 55 | ಬಿ | 91  | ಬಿ |
| 20 | ಎ  | 56 | ಡಿ | 92  | ಡಿ |
| 21 | ಬಿ | 57 | ಬಿ | 93  | ಬಿ |
| 22 | ಎ  | 58 | ಎ  | 94  | ಎ  |
| 23 | ಸಿ | 59 | ಡಿ | 95  | ಸಿ |
| 24 | ಸಿ | 60 | ಎ  | 96  | ಎ  |
| 25 | ಬಿ | 61 | ಎ  | 97  | ಬಿ |
| 26 | ಬಿ | 62 | ಸಿ | 98  | ಡಿ |
| 27 | ಸಿ | 63 | ಡಿ | 99  | ಬಿ |
| 28 | ಬಿ | 64 | ಎ  | 100 | ಬಿ |
| 29 | ಎ  | 65 | ಬಿ |     |    |
| 30 | ಸಿ | 66 | ಸಿ |     |    |
| 31 | ಎ  | 67 | ಎ  |     |    |
| 32 | ಸಿ | 68 | ಸಿ |     |    |
| 33 | ಡಿ | 69 | ಸಿ |     |    |
| 34 | ಎ  | 70 | ಬಿ |     |    |
| 35 | ಎ  | 71 | ಬಿ |     |    |
| 36 | ಸಿ | 72 | ಎ  |     |    |

SET - 1 (ONE)

Dr. D.V. PARAMASHIVAMURTHY  
 Professor - 13 OE 6215  
 Dr. D.V.G. Kannada Adhyayana Kendra  
 Tumkur University  
 TUMKUR - 572 103.

**TUMKUR UNIVERSITY**  
**PhD ENTRANCE EXAMINATION-2023**  
**Key Answer SET-1**

| Question No. | Key Answer | Question No. | Key Answer |
|--------------|------------|--------------|------------|
| 1.           | D          | 51.          | D          |
| 2.           | C          | 52.          | B          |
| 3.           | B          | 53.          | B          |
| 4.           | D          | 54.          | B          |
| 5.           | C          | 55.          | C          |
| 6.           | B          | 56.          | B          |
| 7.           | A          | 57.          | D          |
| 8.           | A          | 58.          | B          |
| 9.           | A          | 59.          | A          |
| 10.          | A          | 60.          | A          |
| 11.          | A          | 61.          | C          |
| 12.          | B          | 62.          | B          |
| 13.          | B          | 63.          | C          |
| 14.          | B          | 64.          | D          |
| 15.          | C          | 65.          | C          |
| 16.          | C          | 66.          | D          |
| 17.          | A          | 67.          | A          |
| 18.          | C          | 68.          | A          |
| 19.          | C          | 69.          | B          |
| 20.          | D          | 70.          | C          |
| 21.          | A          | 71.          | B          |
| 22.          | D          | 72.          | C          |
| 23.          | D          | 73.          | D          |
| 24.          | D          | 74.          | B          |
| 25.          | C          | 75.          | B          |

BOE members:

- 1) Dr. Patil Mallikarjun B - *M. Patil*
- 2) Dr. Chandrali Baishy - *Chandrali*
- 3) Dr. H.S. Boragowala - *Boragowala*

|     |   |      |   |
|-----|---|------|---|
| 26. | C | 76.  | A |
| 27. | C | 77.  | A |
| 28. | A | 78.  | A |
| 29. | B | 79.  | D |
| 30. | A | 80.  | D |
| 31. | A | 81.  | A |
| 32. | B | 82.  | B |
| 33. | D | 83.  | C |
| 34. | B | 84.  | A |
| 35. | B | 85.  | A |
| 36. | D | 86.  | B |
| 37. | D | 87.  | B |
| 38. | C | 88.  | B |
| 39. | C | 89.  | B |
| 40. | C | 90.  | D |
| 41. | C | 91.  | B |
| 42. | D | 92.  | C |
| 43. | A | 93.  | D |
| 44. | A | 94.  | D |
| 45. | C | 95.  | C |
| 46. | D | 96.  | B |
| 47. | C | 97.  | C |
| 48. | A | 98.  | C |
| 49. | D | 99.  | D |
| 50. | B | 100. | C |

*M. K. S.*  
24-03-23  
CHAIRMAN

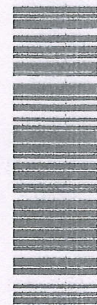
Department of Studies  
& Research in Mathematics  
Tumkur University, Tumkur-572103.

*b. k. s.*

*Bash*

|                                                                 |                         |
|-----------------------------------------------------------------|-------------------------|
| Registration Number:                                            |                         |
| Name of the Candidate : <b>BIOCHEMISTRY</b>                     |                         |
| Name of the Examination Center: <b>PhD Entrance Examination</b> |                         |
| Name of the Subject : <b>2023</b>                               |                         |
| <b>KEY ANSWERS</b>                                              |                         |
| CANDIDATE'S SIGNATURE                                           | INVIGILATOR'S SIGNATURE |

OMR Sheet No.



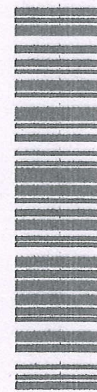
TUT00496

**Subject**

- |                                                  |                                                           |                                             |                                            |
|--------------------------------------------------|-----------------------------------------------------------|---------------------------------------------|--------------------------------------------|
| 1. Biochemistry <input checked="" type="radio"/> | 6. English <input type="radio"/>                          | 11. Management <input type="radio"/>        | 16. Social Work <input type="radio"/>      |
| 2. Biotechnology <input type="radio"/>           | 7. Environmental Science <input type="radio"/>            | 12. Mathematics <input type="radio"/>       | 17. Sociology <input type="radio"/>        |
| 3. Chemistry <input type="radio"/>               | 8. History and Archaeology <input type="radio"/>          | 13. Microbiology <input type="radio"/>      | 18. Zoology <input type="radio"/>          |
| 4. Commerce <input type="radio"/>                | 9. Kannada <input type="radio"/>                          | 14. Physics <input type="radio"/>           | 19. Computer Science <input type="radio"/> |
| 5. Economics <input type="radio"/>               | 10. Library and Information Science <input type="radio"/> | 15. Political Science <input type="radio"/> |                                            |

| Qn. No. | Answers                                | Qn. No. | Answers                                | Qn. No. | Answers                                | Qn. No. | Answers                                | Qn. No. | Answers                                |
|---------|----------------------------------------|---------|----------------------------------------|---------|----------------------------------------|---------|----------------------------------------|---------|----------------------------------------|
| 1       | A B C <input checked="" type="radio"/> | 21      | A B <input checked="" type="radio"/> D | 41      | A <input checked="" type="radio"/> C D | 61      | <input checked="" type="radio"/> B C D | 81      | A B C <input checked="" type="radio"/> |
| 2       | A B <input checked="" type="radio"/> D | 22      | A B <input checked="" type="radio"/> D | 42      | <input checked="" type="radio"/> B C D | 62      | A B <input checked="" type="radio"/> D | 82      | A B <input checked="" type="radio"/> D |
| 3       | A <input checked="" type="radio"/> C D | 23      | A <input checked="" type="radio"/> C D | 43      | A B C <input checked="" type="radio"/> | 63      | A <input checked="" type="radio"/> C D | 83      | <input checked="" type="radio"/> B C D |
| 4       | <input checked="" type="radio"/> B C D | 24      | <input checked="" type="radio"/> B C D | 44      | A B <input checked="" type="radio"/> D | 64      | A B <input checked="" type="radio"/> D | 84      | A B <input checked="" type="radio"/> D |
| 5       | A B <input checked="" type="radio"/> D | 25      | A B C <input checked="" type="radio"/> | 45      | A <input checked="" type="radio"/> C D | 65      | A B C <input checked="" type="radio"/> | 85      | A B C <input checked="" type="radio"/> |
| 6       | A B <input checked="" type="radio"/> D | 26      | A <input checked="" type="radio"/> C D | 46      | <input checked="" type="radio"/> B C D | 66      | A <input checked="" type="radio"/> C D | 86      | <input checked="" type="radio"/> B C D |
| 7       | <input checked="" type="radio"/> B C D | 27      | <input checked="" type="radio"/> B C D | 47      | A B C <input checked="" type="radio"/> | 67      | <input checked="" type="radio"/> B C D | 87      | A <input checked="" type="radio"/> C D |
| 8       | A B <input checked="" type="radio"/> D | 28      | <input checked="" type="radio"/> B C D | 48      | <input checked="" type="radio"/> B C D | 68      | A <input checked="" type="radio"/> C D | 88      | A B C <input checked="" type="radio"/> |
| 9       | A B C <input checked="" type="radio"/> | 29      | A B C <input checked="" type="radio"/> | 49      | A B <input checked="" type="radio"/> D | 69      | A <input checked="" type="radio"/> C D | 89      | A B <input checked="" type="radio"/> D |
| 10      | A B <input checked="" type="radio"/> D | 30      | A B <input checked="" type="radio"/> D | 50      | <input checked="" type="radio"/> B C D | 70      | <input checked="" type="radio"/> B C D | 90      | A B C <input checked="" type="radio"/> |
| 11      | <input checked="" type="radio"/> B C D | 31      | A B C <input checked="" type="radio"/> | 51      | A B <input checked="" type="radio"/> D | 71      | A B <input checked="" type="radio"/> D | 91      | A <input checked="" type="radio"/> C D |
| 12      | A B C <input checked="" type="radio"/> | 32      | <input checked="" type="radio"/> B C D | 52      | A <input checked="" type="radio"/> C D | 72      | A <input checked="" type="radio"/> C D | 92      | A B <input checked="" type="radio"/> D |
| 13      | A B <input checked="" type="radio"/> D | 33      | A <input checked="" type="radio"/> C D | 53      | A B <input checked="" type="radio"/> D | 73      | A B <input checked="" type="radio"/> D | 93      | A <input checked="" type="radio"/> C D |
| 14      | A B C <input checked="" type="radio"/> | 34      | A <input checked="" type="radio"/> C D | 54      | A <input checked="" type="radio"/> C D | 74      | <input checked="" type="radio"/> B C D | 94      | A B <input checked="" type="radio"/> D |
| 15      | A B <input checked="" type="radio"/> D | 35      | A B <input checked="" type="radio"/> D | 55      | A B C <input checked="" type="radio"/> | 75      | A B C <input checked="" type="radio"/> | 95      | A B C <input checked="" type="radio"/> |
| 16      | <input checked="" type="radio"/> B C D | 36      | A B C <input checked="" type="radio"/> | 56      | A B <input checked="" type="radio"/> D | 76      | A B <input checked="" type="radio"/> D | 96      | <input checked="" type="radio"/> B C D |
| 17      | A B <input checked="" type="radio"/> D | 37      | <input checked="" type="radio"/> B C D | 57      | A B <input checked="" type="radio"/> D | 77      | <input checked="" type="radio"/> B C D | 97      | A <input checked="" type="radio"/> C D |
| 18      | A <input checked="" type="radio"/> C D | 38      | A <input checked="" type="radio"/> C D | 58      | <input checked="" type="radio"/> B C D | 78      | A <input checked="" type="radio"/> C D | 98      | A <input checked="" type="radio"/> C D |
| 19      | A <input checked="" type="radio"/> C D | 39      | <input checked="" type="radio"/> B C D | 59      | A B <input checked="" type="radio"/> D | 79      | A B C <input checked="" type="radio"/> | 99      | <input checked="" type="radio"/> B C D |
| 20      | A B C <input checked="" type="radio"/> | 40      | A B <input checked="" type="radio"/> D | 60      | A <input checked="" type="radio"/> C D | 80      | A <input checked="" type="radio"/> C D | 100     | A B C <input checked="" type="radio"/> |

OMR Sheet No.



Marks Awarded \_\_\_\_\_

Evaluator & Signature

1.

MBA

SET-1

KEY ANSWERS

|     |   |     |   |     |   |     |   |      |   |
|-----|---|-----|---|-----|---|-----|---|------|---|
| 01. | A | 21. | A | 41. | A | 61. | A | 81.  | D |
| 02. | B | 22. | B | 42. | A | 62. | B | 82.  | C |
| 03. | A | 23. | C | 43. | B | 63. | A | 83.  | C |
| 04. | C | 24. | C | 44. | A | 64. | A | 84.  | D |
| 05. | D | 25. | D | 45. | C | 65. | B | 85.  | C |
| 06. | C | 26. | D | 46. | C | 66. | D | 86.  | D |
| 07. | D | 27. | C | 47. | D | 67. | B | 87.  | A |
| 08. | D | 28. | B | 48. | D | 68. | C | 88.  | D |
| 09. | A | 29. | B | 49. | B | 69. | A | 89.  | B |
| 10. | A | 30. | A | 50. | B | 70. | C | 90.  | C |
| 11. | C | 31. | D | 51. | B | 71. | A | 91.  | C |
| 12. | C | 32. | B | 52. | A | 72. | A | 92.  | C |
| 13. | D | 33. | B | 53. | D | 73. | A | 93.  | D |
| 14. | A | 34. | C | 54. | A | 74. | B | 94.  | A |
| 15. | D | 35. | D | 55. | D | 75. | C | 95.  | C |
| 16. | C | 36. | D | 56. | D | 76. | A | 96.  | A |
| 17. | C | 37. | C | 57. | D | 77. | B | 97.  | D |
| 18. | C | 38. | C | 58. | C | 78. | D | 98.  | C |
| 19. | A | 39. | C | 59. | A | 79. | D | 99.  | D |
| 20. | B | 40. | D | 60. | B | 80. | D | 100. | D |

KEY ANSWERS

| Question No | Key Answer | Question No | Key Answer | Question No | Key Answer | Question No | Key Answer |
|-------------|------------|-------------|------------|-------------|------------|-------------|------------|
| 1           | D          | 31          | C          | 61          | C          | 91          | C          |
| 2           | B          | 32          | D          | 62          | D          | 92          | A          |
| 3           | C          | 33          | B          | 63          | B          | 93          | D          |
| 4           | A          | 34          | D          | 64          | A          | 94          | A          |
| 5           | C          | 35          | C          | 65          | D          | 95          | B          |
| 6           | A          | 36          | B          | 66          | C          | 96          | D          |
| 7           | D          | 37          | C          | 67          | B          | 97          | A          |
| 8           | D          | 38          | A          | 68          | B          | 98          | D          |
| 9           | D          | 39          | C          | 69          | C          | 99          | C          |
| 10          | A          | 40          | C          | 70          | D          | 100         | B          |
| 11          | C          | 41          | D          | 71          | D          |             |            |
| 12          | B          | 42          | C          | 72          | B          |             |            |
| 13          | B          | 43          | D          | 73          | C          |             |            |
| 14          | C          | 44          | A          | 74          | B          |             |            |
| 15          | A          | 45          | A          | 75          | A          |             |            |
| 16          | C          | 46          | A          | 76          | C          |             |            |
| 17          | B          | 47          | C          | 77          | C          |             |            |
| 18          | A          | 48          | A          | 78          | C          |             |            |
| 19          | D          | 49          | B          | 79          | B          |             |            |
| 20          | C          | 50          | C          | 80          | C          |             |            |
| 21          | D          | 51          | B          | 81          | C          |             |            |
| 22          | B          | 52          | C          | 82          | A          |             |            |
| 23          | C          | 53          | A          | 83          | C          |             |            |
| 24          | A          | 54          | D          | 84          | C          |             |            |
| 25          | B          | 55          | A          | 85          | D          |             |            |
| 26          | B          | 56          | D          | 86          | D B        |             |            |
| 27          | C          | 57          | B          | 87          | D          |             |            |
| 28          | B          | 58          | C          | 88          | C          |             |            |
| 29          | D          | 59          | D          | 89          | A          |             |            |
| 30          | C          | 60          | C          | 90          | A          |             |            |

## Key Answer Sheet ph.D Entrance-2022-23

| Q.N. | KA | C | Q.N. | KA | Q.N. | KA | Q.N.  | KA |
|------|----|---|------|----|------|----|-------|----|
| 1-b  |    |   | 26-a |    | 51-c |    | 76-c  |    |
| 2-c  |    |   | 27-d |    | 52-c |    | 77-d  |    |
| 3-d  |    |   | 28-c |    | 53-b |    | 78-b  |    |
| 4-a  |    |   | 29-b |    | 54-b |    | 79-d  |    |
| 5-c  |    |   | 30-d |    | 55-a |    | 80-d  |    |
| 6-a  |    |   | 31-c |    | 56-a |    | 81-c  |    |
| 7-d  |    |   | 32-c |    | 57-c |    | 82-a  |    |
| 8-a  |    |   | 33-d |    | 58-c |    | 83-c  |    |
| 9-a  |    |   | 34-a |    | 59-c |    | 84-a  |    |
| 10-b |    |   | 35-d |    | 60-c |    | 85-a  |    |
| 11-b |    |   | 36-a |    | 61-a |    | 86-d  |    |
| 12-d |    |   | 37-d |    | 62-b |    | 87-b  |    |
| 13-c |    |   | 38-a |    | 63-d |    | 88-d  |    |
| 14-c |    |   | 39-c |    | 64-c |    | 89-b  |    |
| 15-c |    |   | 40-a |    | 65-c |    | 90-c  |    |
| 16-a |    |   | 41-c |    | 66-b |    | 91-a  |    |
| 17-d |    |   | 42-d |    | 67-a |    | 92-a  |    |
| 18-b |    |   | 43-b |    | 68-b |    | 93-b  |    |
| 19-d |    |   | 44-d |    | 69-c |    | 94-c  |    |
| 20-b |    |   | 45-d |    | 70-d |    | 95-c  |    |
| 21-d |    |   | 46-a |    | 71-b |    | 96-d  |    |
| 22-c |    |   | 47-a |    | 72-a |    | 97-d  |    |
| 23-c |    |   | 48-a |    | 73-b |    | 98-a  |    |
| 24-b |    |   | 49-a |    | 74-c |    | 99-b  |    |
| 25-d |    |   | 50-c |    | 75-b |    | 100-b |    |

# Ph. D Entrance Examination in Economics - 2023

## Key Answer

| Question Number | Key Answer | Question Number | Key Answer | Question Number | Key Answer | Question Number | Key Answer | Question Number | Key Answer |
|-----------------|------------|-----------------|------------|-----------------|------------|-----------------|------------|-----------------|------------|
| 1               | b          | 21              | B          | 41              | a          | 61              | B          | 81              | b          |
| 2               | c          | 22              | A          | 42              | d          | 62              | B          | 82              | d          |
| 3               | b          | 23              | B          | 43              | d          | 63              | C          | 83              | d          |
| 4               | d          | 24              | D          | 44              | a          | 64              | C          | 84              | a          |
| 5               | d          | 25              | B          | 45              | c          | 65              | C          | 85              | a          |
| 6               | b          | 26              | C          | 46              | b          | 66              | B          | 86              | d          |
| 7               | b          | 27              | B          | 47              | a          | 67              | D          | 87              | c          |
| 8               | d          | 28              | A          | 48              | c          | 68              | C          | 88              | b          |
| 9               | c          | 29              | A          | 49              | b          | 69              | B          | 89              | c          |
| 10              | b          | 30              | C          | 50              | b          | 70              | A          | 90              | a          |
| 11              | a          | 31              | D          | 51              | c          | 71              | A          | 91              | c          |
| 12              | a          | 32              | B          | 52              | c          | 72              | C          | 92              | a          |
| 13              | d          | 33              | C          | 53              | b          | 73              | A          | 93              | a          |
| 14              | b          | 34              | C          | 54              | c          | 74              | C          | 94              | d          |
| 15              | d          | 35              | C          | 55              | c          | 75              | D          | 95              | b          |
| 16              | b          | 36              | D          | 56              | c          | 76              | C          | 96              | c          |
| 17              | a          | 37              | B          | 57              | a          | 77              | B          | 97              | c          |
| 18              | d          | 38              | C          | 58              | d          | 78              | C          | 98              | c          |
| 19              | a          | 39              | B          | 59              | a          | 79              | B          | 99              | c          |
| 20              | d          | 40              | C          | 60              | a          | 80              | D          | 100             | a          |

| Q. No. | Key | Q. No. | Key | Q. No. | Key | Q. No. | Key |
|--------|-----|--------|-----|--------|-----|--------|-----|
| 1      | a   | 26     | d   | 51     | c   | 76     | b   |
| 2      | c   | 27     | b   | 52     | d   | 77     | d   |
| 3      | c   | 28     | a   | 53     | d   | 78     | a   |
| 4      | a   | 29     | c   | 54     | b   | 79     | c   |
| 5      | c   | 30     | d   | 55     | c   | 80     | a   |
| 6      | c   | 31     | a   | 56     | b   | 81     | b   |
| 7      | a   | 32     | d   | 57     | a   | 82     | c   |
| 8      | a   | 33     | c   | 58     | d   | 83     | a   |
| 9      | b   | 34     | c   | 59     | d   | 84     | a   |
| 10     | d   | 35     | b   | 60     | d   | 85     | c   |
| 11     | c   | 36     | a   | 61     | a   | 86     | b   |
| 12     | a   | 37     | d   | 62     | b   | 87     | c   |
| 13     | a   | 38     | d   | 63     | a   | 88     | a   |
| 14     | b   | 39     | a   | 64     | c   | 89     | d   |
| 15     | c   | 40     | a   | 65     | a   | 90     | a   |
| 16     | c   | 41     | a   | 66     | d   | 91     | a   |
| 17     | b   | 42     | d   | 67     | d   | 92     | b   |
| 18     | a   | 43     | a   | 68     | a   | 93     | b   |
| 19     | a   | 44     | d   | 69     | a   | 94     | a   |
| 20     | d   | 45     | a   | 70     | d   | 95     | d   |
| 21     | c   | 46     | a   | 71     | d   | 96     | a   |
| 22     | d   | 47     | d   | 72     | c   | 97     | a   |
| 23     | c   | 48     | d   | 73     | a   | 98     | c   |
| 24     | d   | 49     | a   | 74     | c   | 99     | d   |
| 25     | a   | 50     | c   | 75     | b   | 100    | a   |

**Department of Studies and Research in Environmental Science**  
**Ph.D. Entrance Examination March – 2023**  
**Subject: Environmental Science**

**KEY ANSWERS 1**

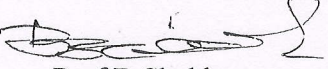
|    |   |    |   |    |   |    |   |     |   |
|----|---|----|---|----|---|----|---|-----|---|
| 1  | d | 21 | c | 41 | a | 61 | b | 81  | c |
| 2  | b | 22 | a | 42 | d | 62 | b | 82  | b |
| 3  | c | 23 | b | 43 | a | 63 | c | 83  | c |
| 4  | b | 24 | a | 44 | c | 64 | b | 84  | d |
| 5  | a | 25 | c | 45 | d | 65 | c | 85  | a |
| 6  | a | 26 | a | 46 | d | 66 | b | 86  | b |
| 7  | b | 27 | c | 47 | c | 67 | c | 87  | d |
| 8  | a | 28 | c | 48 | a | 68 | d | 88  | a |
| 9  | d | 29 | b | 49 | c | 69 | d | 89  | a |
| 10 | b | 30 | c | 50 | b | 70 | b | 90  | b |
| 11 | b | 31 | d | 51 | b | 71 | b | 91  | c |
| 12 | d | 32 | a | 52 | a | 72 | d | 92  | c |
| 13 | b | 33 | b | 53 | c | 73 | a | 93  | a |
| 14 | d | 34 | c | 54 | b | 74 | d | 94  | c |
| 15 | b | 35 | c | 55 | a | 75 | c | 95  | b |
| 16 | b | 36 | b | 56 | b | 76 | c | 96  | c |
| 17 | c | 37 | b | 57 | d | 77 | c | 97  | a |
| 18 | a | 38 | a | 58 | a | 78 | d | 98  | b |
| 19 | b | 39 | a | 59 | a | 79 | a | 99  | c |
| 20 | a | 40 | a | 60 | b | 80 | d | 100 | d |

**Ph.D Entrance Test, March 2023**  
**Sub: COMMERCE**

**KEY Answers of Set – 1**

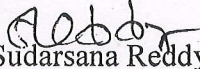
| Q. NO | Key | Q. NO | Key | Q. NO | Key | Q. NO | Key | Q. NO | Key |
|-------|-----|-------|-----|-------|-----|-------|-----|-------|-----|
| 1.    | C   | 21.   | C   | 41.   | D   | 61.   | B   | 81.   | A   |
| 2.    | C   | 22.   | D   | 42.   | C   | 62.   | D   | 82.   | C   |
| 3.    | C   | 23.   | C   | 43.   | B   | 63.   | C   | 83.   | C   |
| 4.    | C   | 24.   | D   | 44.   | A   | 64.   | A   | 84.   | C   |
| 5.    | B   | 25.   | D   | 45.   | A   | 65.   | D   | 85.   | B   |
| 6.    | A   | 26.   | C   | 46.   | C   | 66.   | C   | 86.   | C   |
| 7.    | C   | 27.   | B   | 47.   | B   | 67.   | A   | 87.   | B   |
| 8.    | D   | 28.   | D   | 48.   | C   | 68.   | A   | 88.   | C   |
| 9.    | C   | 29.   | C   | 49.   | C   | 69.   | D   | 89.   | A   |
| 10.   | D   | 30.   | A   | 50.   | C   | 70.   | A   | 90.   | B   |
| 11.   | A   | 31.   | A   | 51.   | B   | 71.   | B   | 91.   | B   |
| 12.   | D   | 32.   | B   | 52.   | A   | 72.   | A   | 92.   | B   |
| 13.   | A   | 33.   | C   | 53.   | B   | 73.   | C   | 93.   | B   |
| 14.   | C   | 34.   | B   | 54.   | D   | 74.   | C   | 94.   | B   |
| 15.   | A   | 35.   | B   | 55.   | A   | 75.   | C   | 95.   | D   |
| 16.   | B   | 36.   | B   | 56.   | B   | 76.   | B   | 96.   | D   |
| 17.   | B   | 37.   | B   | 57.   | D   | 77.   | C   | 97.   | B   |
| 18.   | A   | 38.   | B   | 58.   | C   | 78.   | C   | 98.   | A   |
| 19.   | A   | 39.   | D   | 59.   | B   | 79.   | D   | 99.   | D   |
| 20.   | D   | 40.   | B   | 60.   | C   | 80.   | B   | 100.  | D   |

**Ph.D BOE Members**

  
Prof. B. Shekhar

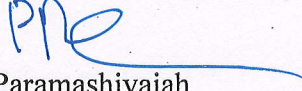
Prof. Ashok M.L

(Sd)

  
Prof. G. Sudarsana Reddy

Prof. Basavaraj Kundan

(Sd)

  
Prof. P. Paramashivaiah

## Ph.D. ENTRANCE TEST MARCH -2023

## KEY ANSWERS

## ZOOLOGY

| SECTION-A |          |       |          | SECTION-B |          |       |          |       |          |       |          |
|-----------|----------|-------|----------|-----------|----------|-------|----------|-------|----------|-------|----------|
| Q.No.     | Ans. key | Q.No. | Ans. key | Q.No.     | Ans. key | Q.No. | Ans. key | Q.No. | Ans. key | Q.No. | Ans. key |
| 1         | A        | 21    | C        | 41        | C        | 61    | C        | 81    | C        |       |          |
| 2         | D        | 22    | C        | 42        | D        | 62    | C        | 82    | A        |       |          |
| 3         | C        | 23    | C        | 43        | B        | 63    | D        | 83    | A        |       |          |
| 4         | B        | 24    | D        | 44        | D        | 64    | A        | 84    | A        |       |          |
| 5         | C        | 25    | B        | 45        | A        | 65    | A        | 85    | B        |       |          |
| 6         | A        | 26    | A        | 46        | C        | 66    | B        | 86    | A        |       |          |
| 7         | B        | 27    | A        | 47        | D        | 67    | A        | 87    | D        |       |          |
| 8         | B        | 28    | D        | 48        | C        | 68    | B        | 88    | A        |       |          |
| 9         | C        | 29    | B        | 49        | A        | 69    | C        | 89    | A        |       |          |
| 10        | D        | 30    | B        | 50        | D        | 70    | C        | 90    | C        |       |          |
| 11        | D        | 31    | C        | 51        | A        | 71    | A        | 91    | B        |       |          |
| 12        | A        | 32    | B        | 52        | A        | 72    | B        | 92    | C        |       |          |
| 13        | D        | 33    | C        | 53        | A        | 73    | C        | 93    | A        |       |          |
| 14        | C        | 34    | A        | 54        | D        | 74    | D        | 94    | A        |       |          |
| 15        | D        | 35    | C        | 55        | B        | 75    | B        | 95    | C        |       |          |
| 16        | C        | 36    | B        | 56        | C        | 76    | A        | 96    | A        |       |          |
| 17        | A        | 37    | C        | 57        | D        | 77    | C        | 97    | C        |       |          |
| 18        | D        | 38    | B        | 58        | B        | 78    | B        | 98    | A        |       |          |
| 19        | C        | 39    | A        | 59        | D        | 79    | B        | 99    | A        |       |          |
| 20        | A        | 40    | A        | 60        | B        | 80    | B        | 100   | C        |       |          |

**Tumkur University**  
**Ph. D Entrance Examination 2022-23**  
**Key Answers of SET – 2**  
**Subject: Computer Science**

| Question Number | Answer | Question Number | Answer | Question Number | Answer | Question Number | Answer |
|-----------------|--------|-----------------|--------|-----------------|--------|-----------------|--------|
| 1.              | A      | 26.             | C      | 51.             | D      | 76.             | D      |
| 2.              | A      | 27.             | C      | 52.             | B      | 77.             | C      |
| 3.              | C      | 28.             | A      | 53.             | C      | 78.             | C      |
| 4.              | B      | 29.             | C      | 54.             | C      | 79.             | C      |
| 5.              | D      | 30.             | C      | 55.             | D      | 80.             | D      |
| 6.              | D      | 31.             | B      | 56.             | A      | 81.             | B      |
| 7.              | A      | 32.             | C      | 57.             | D      | 82.             | B      |
| 8.              | B      | 33.             | D      | 58.             | D      | 83.             | C      |
| 9.              | C      | 34.             | B      | 59.             | C      | 84.             | B      |
| 10.             | D      | 35.             | C      | 60.             | C      | 85.             | A      |
| 11.             | B      | 36.             | C      | 61.             | A      | 86.             | C      |
| 12.             | D      | 37.             | C      | 62.             | A      | 87.             | D      |
| 13.             | D      | 38.             | A      | 63.             | C      | 88.             | C      |
| 14.             | C      | 39.             | A      | 64.             | A      | 89.             | A      |
| 15.             | B      | 40.             | C      | 65.             | B      | 90.             | C      |
| 16.             | D      | 41.             | B      | 66.             | B      | 91.             | C      |
| 17.             | B      | 42.             | B      | 67.             | B      | 92.             | A      |
| 18.             | A      | 43.             | A      | 68.             | C      | 93.             | A      |
| 19.             | D      | 44.             | C      | 69.             | A      | 94.             | B      |
| 20.             | D      | 45.             | D      | 70.             | A      | 95.             | A      |
| 21.             | C      | 46.             | B      | 71.             | A      | 96.             | B      |
| 22.             | B      | 47.             | C      | 72.             | A      | 97.             | D      |
| 23.             | A      | 48.             | C      | 73.             | B      | 98.             | C      |
| 24.             | B      | 49.             | A      | 74.             | A      | 99.             | A      |
| 25.             | B      | 50.             | B      | 75.             | B      | 100.            | D      |

# LIBRARY AND INFORMATION SCIENCE

## PhD Entrance Test - 2023

### Answer Keys

|     |   |     |   |     |   |      |   |
|-----|---|-----|---|-----|---|------|---|
| 1.  | C | 26. | D | 51. | C | 76.  | A |
| 2.  | A | 27. | A | 52. | C | 77.  | C |
| 3.  | A | 28. | C | 53. | C | 78.  | A |
| 4.  | D | 29. | D | 54. | A | 79.  | A |
| 5.  | A | 30. | D | 55. | C | 80.  | B |
| 6.  | A | 31. | C | 56. | C | 81.  | C |
| 7.  | A | 32. | B | 57. | B | 82.  | B |
| 8.  | D | 33. | A | 58. | D | 83.  | B |
| 9.  | B | 34. | C | 59. | A | 84.  | C |
| 10. | C | 35. | B | 60. | B | 85.  | A |
| 11. | D | 36. | C | 61. | C | 86.  | C |
| 12. | D | 37. | B | 62. | D | 87.  | C |
| 13. | A | 38. | C | 63. | C | 88.  | D |
| 14. | B | 39. | C | 64. | B | 89.  | C |
| 15. | D | 40. | B | 65. | D | 90.  | B |
| 16. | D | 41. | B | 66. | C | 91.  | C |
| 17. | B | 42. | C | 67. | D | 92.  | C |
| 18. | B | 43. | D | 68. | A | 93.  | D |
| 19. | C | 44. | B | 69. | C | 94.  | D |
| 20. | A | 45. | C | 70. | B | 95.  | B |
| 21. | B | 46. | A | 71. | C | 96.  | C |
| 22. | C | 47. | D | 72. | B | 97.  | C |
| 23. | B | 48. | D | 73. | D | 98.  | B |
| 24. | D | 49. | B | 74. | C | 99.  | C |
| 25. | C | 50. | B | 75. | B | 100. | A |

*Keshav*  
24/3/23

CHAIRMAN (BOE)  
Dept. of Studies & Research in  
Library & Information Science  
Jyoti University  
Bhopal - 462013.

**Answer Key of PhD Entrance Exams 23-24**

[illegible]