

Ba/Bs/Mat-401 (AK)

2 0 2 1

(4th Semester)

MATHEMATICS

Paper : Mat-401

(Advanced Calculus—II and Analytical Geometry)

KEY ANSWERS FOR OBJECTIVES

SECTION—I

(Marks : 10)

Choose and write the correct answer from the options
provided : $1 \times 10 = 10$

1. (a)
2. (a)
3. (c)
4. (c)
5. (a)
6. (c)
7. (c)
8. (b)
9. (b)
10. (c)

(2)

SECTION—II

(Marks : 5)

Fill in the blanks :

1×5=5

1. tangent at the vertex
2. conic
3. orthogonal trajectory
4. the polar of one passes through the other
5. $(x-1)^2 + (y-2)^2 + (z-3)^2 = 3^2$

SECTION—III

(Marks : 10)

State *True* or *False* and give a brief justification (any *five*) :

2×5=10

1. True
2. False
3. True
4. False
5. True
6. False
7. False
8. False

★ ★ ★