

**Karnataka DCET (Diploma Common Entrance Test)** is conducted by the **Karnataka Examination Authority (KEA)** for **diploma holders** seeking **direct admission into the second year of B.Tech programs** in Karnataka.

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### Section-Wise Syllabus for Karnataka DCET

The **Karnataka DCET exam** consists of **two papers**:

1 **Applied Science & Mathematics** (Common for All Branches) – 50 Marks






2 **Engineering Paper** (Based on Respective Diploma Branch) – 100 Marks

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### Section 1: Applied Science & Mathematics (50 Marks, Common for All Branches)

This section tests fundamental concepts in **physics, chemistry, and mathematics** relevant to engineering studies.

#### Mathematics (30 Marks)

-  Algebra – Determinants, Matrices, Quadratic Equations
-  Calculus – Limits, Differentiation, Integration
-  Trigonometry – Identities, Heights & Distances
-  Probability & Statistics – Mean, Median, Standard Deviation
-  Vector Algebra – Dot Product, Cross Product, Gradient




#### Applied Science (20 Marks)

-  Physics – Laws of Motion, Gravitation, Work, Energy, Power
  -  Chemistry – Atomic Structure, Chemical Bonding, Electrochemistry
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### Section 2: Engineering Paper (100 Marks, Based on Diploma Branch)

This section is specific to **your diploma specialization**. Candidates must prepare according to their respective **engineering branch syllabus**.

#### Civil Engineering

-  Strength of Materials
-  Structural Engineering
-  Hydraulics & Fluid Mechanics

✔ Transportation Engineering

✔ Surveying

### **Mechanical Engineering**

✔ Thermodynamics

✔ Manufacturing Processes

✔ Machine Design

✔ Engineering Mechanics

✔ Heat & Mass Transfer

### **Electrical & Electronics Engineering**

✔ Circuit Theory

✔ Electrical Machines

✔ Power Systems

✔ Digital Electronics

✔ Microprocessors

### **Computer Science & IT**

✔ Data Structures & Algorithms

✔ Operating Systems

✔ Database Management Systems

✔ Computer Networks

✔ Object-Oriented Programming

### **Architecture Engineering**

✔ Building Materials & Construction

✔ Structural Engineering

✔ Town Planning & Urban Design

✔ Environmental Engineering

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### **Karnataka DCET Exam Pattern**

**Paper Subject**


**Marks**


Paper 1 Applied Science & Mathematics

50 Marks

Paper 2 Engineering (Based on Diploma Branch) 100 Marks


| Paper | Subject       | Marks     |
|-------|---------------|-----------|
| Total | 150 Questions | 150 Marks |

 **Exam Duration:** 3 Hours (Both Papers)

 **Marking Scheme:** +1 for Correct Answer, No Negative Marking

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### Preparation Tips for Karnataka DCET

 **Strengthen Mathematics & Science:** Focus on **mathematics and physics** topics, as they are common across all branches.

 **Revise Diploma Subjects:** Study core **engineering subjects** from your diploma to score well in the **engineering paper**.

 **Solve Previous Year Papers:** Attempt **past DCET question papers** to understand **exam trends** and improve speed.

 **Mock Tests & Time Management:** Take **mock tests** to practice under **timed conditions** and boost confidence.