# Department of Electronics & Communication Engineering, National Institute of Technology Karnataka, Surathkal

Ph.D. Admission – December 2018
List of candidates shortlisted for Interview

| SI. No. | Application No. | Name of the Candidate        |
|---------|-----------------|------------------------------|
| 1.      | P18EC0003       | SUGALI MUDE SUBRAMANYAM NAIK |
| 2.      | P18EC0004       | SURAJ N SHINDE               |
| 3.      | P18EC0005       | SURESH N                     |
| 4.      | P18EC0007       | VIGNESH R                    |
| 5.      | P18EC0013       | KALESH BUSA                  |
| 6.      | P18EC0015       | BADUGU VAMSI KRISHNA         |
| 7.      | P18EC0016       | RICHU PAUL K                 |
| 8.      | P18EC0021       | PRADEEP GORRE                |
| 9.      | P18EC0023       | L BHARGAVA KUMAR             |
| 10.     | P18EC0026       | KIRAN                        |

**Note:** A specimen copy of the call letter along with detailed syllabus for the Written Test given in the following pages.

Sd/-

23-11-2018 HOD, E&C Engg.

#### NATIONAL INSTITUTE OF TECHNOLOGY KARNATAKA, SURATHKAL

P.O. SRINIVASNAGAR, MANGALURU-575 025

Telephone: 2474000-2474023 Fax: 91-0824-2474033 Website: www.nitk.ac.in

Email: nitk.aregistrar@gmail.com

No. PhD/2018-19/E6 Date: 23.11.2018

#### **Admit Card**

#### Sub: Ph.D. Programme – Written Aptitude Test / Interview for the year 2018-19

| With         | reference    | to      | his/her      | application     | for        | admission       | to        | PhD       | programme,    |
|--------------|--------------|---------|--------------|-----------------|------------|-----------------|-----------|-----------|---------------|
| Mr./Ms       |              |         |              |                 |            |                 | is reque  | ested to  | appear for a  |
| written test | at his/her   | own c   | ost. He/sh   | e has to produ  | uce all t  | he original re  | cords su  | ich as I  | Date of Birth |
| Certificate, | Degree M     | arks Ca | ards, SC/S   | T/ OBC certif   | ficate(if  | applicable as   | per pro   | forma)    | Person with   |
| disability c | ertificate ( | if appl | icable), Spo | onsorship lette | r ( if app | olicable) and C | Conduct ( | Certifica | ate.          |
|              |              |         |              |                 |            |                 |           |           |               |

Department : Department of Electronics & Communication Engineering

Place of Reporting : Department of Electronics & Communication Engineering

Written Test Date and Time : December 5, 2018 9.30 AM to 10.30 AM

Document Verification : December 10.30 AM Onwards

**Interview Date and Time**: December 11 AM onwards

#### NOTE:

- 1 Candidates should come prepared to appear for a written Aptitude Test before the interview. Fee Structure for PhD programme and Course syllabus for aptitude test can be referred on the Institute's website, i.e. <a href="https://www.nitk.ac.in">www.nitk.ac.in</a>
- 2 Candidates who have <u>not submitted</u> marks of final examination along with application form shall produce the same at the time of admission if available. However, candidates who have written final year examinations and yet to obtain final semester mark cards should submit the same on or before **15.01.2019**
- 4 Your candidature for this test is provisional & is subject to your fulfilling the educational qualifications & other criteria prescribed for the programme as mentioned in Information Brochure, failing which your candidature can be summarily rejected after verification/scrutiny at a later stage
- 5 Please carry the Admit Card to secure admission to the examination hall. You are responsible for safe custody of the Admit Card and in the event of any other person using this Admit Card, the responsibility lies on you to prove that you have not used the service of an impersonator.
- 6 The candidates who have qualified from the other university (Other than NITK) have to produce Migration Certificate in order to validate their admission.
- 7 Please note that no travelling expenses shall be payable for appearing in the written test/Interview
- 8 The Selected candidates are required to pay fees and get admitted during the period 17.12.2018 24.12.2018

| Το: Mr. | /Ms. |  |  |
|---------|------|--|--|
|         |      |  |  |

## Dept. of E&C Engg., NITK Surathkal

Ph.D Admission Test (05-12-2018 9:30 – 10:30 AM)

Venue: E&C Seminar Hall (Second Floor of Dept of E&C)

The test paper will have 3 parts. Part A is compulsory. The candidate can answer Part B or Part C depending on the area of interest. Each part has 15 multiple choice type questions. Each correct answer carries 1 mark and wrong answer carries – 0.25 marks.

### **Syllabus**

**Part A**: Linear Algebra, Calculus, Differential and Difference equations. Numerical methods, Transforms, Linear circuits and networks, Electronic components and Devices, Analog Electronics, Digital Electronics, Signals and Systems, Linear and Digital Control Theory.

**Part B**: Electromagnetic Waves, Probability and Random Processes, Communication Theory, Communication Circuits, Transmission Lines, Wave Guides, Antennas, Microwave devices and Circuits, Data Communications, Communication Networks, Satellite Communication, Optical Communication, Signal Processing.

**Part C**: Linear and Digital IC's, Digital System Design, VVLSI Technology, CMOS, VLSI, Mixed Signal Design, HDL, Data converters, Microprocessors, Computer Architecture and organization, Logic Synthesis, DSP Architectures, Embedded Systems.