

**Indian Institute of Technology Palakkad**  
**Electrical Engineering**  
**Research Admissions - January 2020 Semester**

The candidates shortlisted for tests/interviews in the different advertised areas are given below. Written tests and interviews will be held from December 30, 2019. Intimation emails will be sent on December 21, 2019. Check the intimation email for more details.

**Instructions and Information:**

1. Test/Interview:
  - a) **Date:** 30 December, 2019
  - b) **Reporting Time:** 9:30 am
  - c) **Reporting Venue:** Academic Block, Ahalia Integrated Campus, IIT Palakkad, Kozhippara P.O., Kerala
2. It is mandatory that the candidates confirm their attendance via email latest by 25 December, 2019 ([ee-admissions@iitpkd.ac.in](mailto:ee-admissions@iitpkd.ac.in))
3. Last date for contacting department if there are any discrepancies: 23 December, 2019 ([ee-admissions@iitpkd.ac.in](mailto:ee-admissions@iitpkd.ac.in))
4. Institute has limited hostel facility (only cots and no beddings) on campus, which will be allotted on first-request first-serve basis. There will be charge of Rs 50/- per day, for shared accommodation in a double seated room. If you want to avail the hostel facility, please send an email to [hostelmanager@iitpkd.ac.in](mailto:hostelmanager@iitpkd.ac.in) with your Application Number, Name, Check-in and Check-Out time.

**List of Things to Carry for Test/Interview:**

1. A printout of the Application Summary page from the portal
2. A valid Photo Identity Card
3. Class 10 and 12: Original mark sheets and pass certificates
4. Undergraduate and postgraduate degree: Original certificates and original mark lists
5. National Level Tests mentioned in your application: Original Scorecards (GATE)
6. Other Ph.D. Fellowships mentioned in your application: Award Letters
7. A recent colour passport-sized photograph
8. Updated resume
9. Candidates who have not paid the application fee: A DD for Rs. 100/- drawn in favour of "IIT Palakkad", payable at Palakkad, when they come for the test/interview.

## Area: Communication and Signal Processing

### Shortlisting Criteria:

	Unreserved	OBC/GEN-EWS	SC/ST/PWD
<b>MS</b>	Valid GATE score > 500	Valid GATE score > 450	Valid GATE score > 400
<b>PhD</b>	MTech from CFTI/Foreign university with score $\geq 75\%$ OR MTech from non-CFTI with score $\geq 87\%$ OR Best GATE score > 500	MTech from CFTI/Foreign university with score $\geq 70\%$ OR MTech from non-CFTI with score $\geq 82\%$ OR Best GATE score > 450	MTech from CFTI/Foreign university with score $\geq 65\%$ OR MTech from non-CFTI with score $\geq 77\%$ OR Best GATE score > 400

### Shortlisted Candidates:

PhD
None

## Area: Power System Engineering

### Shortlisting Criteria:

	Unreserved	OBC/GEN-EWS	SC/ST/PWD
<b>MS</b>	Valid GATE score [GATE score is not required for part-time candidates] and B.Tech. score $\geq 75\%$	Valid GATE score [GATE score is not required for part-time candidates] and B.Tech. score $\geq 70\%$	Valid GATE score [GATE score is not required for part-time candidates] and B.Tech. score $\geq 65\%$
<b>PhD</b>	Masters in Engg/Tech with score $\geq 70\%$ OR Best GATE score $\geq 430$ OR IIT Palakkad staff with postgraduate score $\geq 70\%$	Masters in Engg/Tech with score $\geq 65\%$ OR Best GATE score $\geq 380$ OR IIT Palakkad staff with postgraduate score $\geq 65\%$	Masters in Engg/Tech with score $\geq 60\%$ OR Best GATE score $\geq 330$ OR IIT Palakkad staff with postgraduate score $\geq 60\%$

**Shortlisted Candidates:**

MS	PhD
None	A19-EE5745 A19-EE5766

**Syllabus of Written Test:**

Power systems: Transmission line modeling, characteristics of transmission lines, load flow studies, power system dynamics and control, automatic generation and voltage control, fault analysis, power system transients, power system protection, over-current relay, distance protection, differential protection, power system stability, voltage stability, high voltage DC transmission, power quality, state estimation in power system, compensation in power systems, renewable energy systems.

**References:**

- [1] Stevenson, W.D., Elements of Power System Analysis, 4TH edn, McGraw-Hill, New York, 1982.  
[2] Kundur, P., Power System Stability and Control, McGraw-Hill, New York, 1994.

**Area: RF and Microwave****Shortlisting Criteria:**

	Unreserved	OBC/GEN-EWS	SC/ST/PWD
PhD	B.Tech. score $\geq$ 65 % and M.Tech. score $\geq$ 65 %	B.Tech. score $\geq$ 60 % and M.Tech. score $\geq$ 60 %	B.Tech. score $\geq$ 55 % and M.Tech. score $\geq$ 55 %

**Shortlisted Candidates:**

PhD
A19-EE5748

**Syllabus of Written Test:**

**Electromagnetics** - Time varying fields and Maxwell's equations, Plane electromagnetic waves in free space, Reflection and transmission of an interface, Rectangular Waveguides, Transmission lines and Antennas.

**Resources**

- [1] Pozar, D.M.: 'Microwave engineering' (John Wiley & Sons, 1998, 2nd edn.)  
[2] Collins, R.E.: 'Foundations for microwave engineering' (Wiley-IEEE Press, 1984, 2nd edn.)  
[3] R. Garg, P. Bhartia, I. Bahl, and A. Iittipiboon, Microstrip Antenna Design Handbook. Boston, MA: Artech House, 2001.