## Department of Metallurgical & Materials Engineering

## List of candidates Eligible for written Aptitude Test and interview for admission to Ph.D. Programme 2019-20

Date: 03-06-2019

| Sl. No. | Application No. | Name                        |
|---------|-----------------|-----------------------------|
| 1.      | P19MT0001       | Vishwanath Pratap Singh     |
| 2.      | P19MT0022       | Sanjay Kumar                |
| 3.      | P19MT0029       | Ranjith Kumar I             |
| 4.      | P19MT0018       | Harsha G. Patil             |
| 5.      | P19MT0008       | Vaibhav Gaur                |
| 6.      | P19MT0019       | Arvind Kumar                |
| 7.      | P19MT0004       | Manjunath                   |
| 8.      | P19MT0024       | Chinmai Bhat                |
| 9.      | P19MT0011       | Prathviraj M P              |
| 10.     | P19MT0030       | Kamala Nathan D             |
| 11.     | P19MT0023       | N. Purushotham              |
| 12.     | P19MT0020       | Lakkimsetti Lakshmi Praveen |
| 13.     | P19MT0015       | Vikas N P                   |

Place of Reporting: Office, Dept of Metallurgical and Materials Engineering Aptitude Test Date and Time: June 17, 2019 & 11 a.m. – 12 noon Document verification: June 17, 2019, 1.00 p.m.

Interview Date and Time: June 17, 2019, 2.00 p.m. onwards at faculty meeting room

## Instructions

- Written test shall contain MCQs and objective questions with negative marking for incorrect response.
- Use of calculator is permitted. However, the possession and use of cell phones/programmable electronic devices is prohibited.
- All candidates should bring a photo identity card and the call letter. The name used in the ID card must be the same as that used in the application form.
- Candidates are required to bring all the original supporting documents, such as mark/grade cards, degree certificates, GATE score card, caste certificate (for OBC/SC/ ST candidates), PwD certificate (for PwD candidates), and other relevant documents such as sponsorship certificate, experience certificate. In the absence of originals of the above-mentioned documents, your candidature may be cancelled.
- Reprints of research-papers/patents, if any, may be provided.
- Only GATE-qualified candidates are eligible for full time Ph.D. program with Institute scholarship.

- No TA/DA will be provided to candidates for appearing in the written aptitude test/interview.
- The candidates are requested to come prepared for staying overnight, if required, at their own expense.

## Syllabus for written test

The electronic structure of atoms; Types of atomic and molecular bonds and bonding; Energy bands in metals, insulators and semiconductors; Basic crystallography; Defects and dislocations; Laws of thermodynamics; heat capacity; entropy; free energy; Types of Materials: Polymers, metals and alloys, semiconductors, ceramics, composites; Diffusion; Phase rule and phase diagrams; Properties: optical, magnetic, mechanical, electrical, thermal; Corrosion and material degradation; Characterization tools: XRD, SEM, TEM, DSC, TGA, basics of spectroscopy.

Sd/-Head, Department of MME, NITK.