RANKERS STUDY MATERIAL

PHASE TEST –IV PAPER - 1

JEE(Advanced)- 2017

Time Allotted: 1 Hr.

Maximum Marks:88

- Please read the instructions carefully. You are allotted
 5 minutes specifically for this purpose.
- You are not allowed to leave the Examination Hall before the end of the test.

READ THE INSTRUCTIONS CAREFULLY

QUESTION PAPER FORMAT AND MARKING SCHEME:

- 1. Section **A** contains 10 multiple choice questions with one or more than one correct option.
 - **Marking Scheme:** +4 for correct answer, 0 if not attempted and -2 in all other cases.
- 2. Section **B** contains 2 "match the following" type questions and you will have to match entries in Column I with the entries in Column II.
 - **Marking Scheme:** for each entry in Column I, +2 for correct answer, 0 if not attempted and 1 in all other cases.
- 3. Section **C** contains 8 questions. The answer to each question is a single digit integer ranging from 0 to 9 (both inclusive).
 - **Marking Scheme:** +4 for correct answer and 0 in all other cases.

Name of the Candidate	
Enrolment No.	

Useful Data

Gas Constant $R = 8.314 \text{ J K}^{-1} \text{ mol}^{-1}$

= 0.0821 Lit atm K⁻¹ mol⁻¹

= $1.987 \approx 2 \text{ Cal K}^{-1} \text{ mol}^{-1}$

Avogadro's Number $N_a = 6.023 \times 10^{23}$

Planck's constant h = $6.625 \times 10^{-34} \text{ J} \cdot \text{s}$

= $6.625 \times 10^{-27} \text{ erg} \cdot \text{s}$

1 Faraday = 96500 coulomb

1 calorie = 4.2 joule

1 amu = 1.66×10^{-27} kg 1 eV = 1.6×10^{-19} J

Atomic No: H=1, He = 2, Li=3, Be=4, B=5, C=6, N=7, O=8, N=9, Na=11, Mg=12, Si=14,

Al=13, P=15, S=16, Cl=17, Ar=18, K =19, Ca=20, Cr=24, Mn=25, Fe=26,

Co=27, Ni=28, Cu = 29, Zn=30, As=33, Br=35, Ag=47, Sn=50, I=53,

Xe=54, Ba=56, Pb=82, U=92.

Atomic masses: H=1, He=4, Li=7, Be=9, B=11, C=12, N=14, O=16, F=19, Na=23, Mg=24,

AI = 27, Si=28, P=31, S=32, CI=35.5, K=39, Ca=40, Cr=52, Mn=55, Fe=56,

 $Co{=}59,\ Ni{=}58.7,\ Cu{=}63.5,\ Zn{=}65.4,\ As{=}75,\ Br{=}80,\ Ag{=}108,\ Sn{=}118.7,$

I=127, Xe=131, Ba=137, Pb=207, U=238.