



Université d'El Oued

وزارة التعليم العالي و البحث العلمي

كلية التكنولوجيا

Département Genie Mecanique

2021/2022

Sciences et Technologies

**Filière:** Génie Mécanique  
énergétique

**Niveau:**

**Matière:** Anglais technique et Terminologie / Section A / 1

**PV de délibération par matière**

#	Matricule	Examen	CC	MG
1	181839067885	14.0	0.0	14.0
2	181839065624	12.5	0.0	12.5
3	171739072184	0.0	0.0	0.0
4	181439064830	11.5	0.0	11.5
5	171739070052	0.0	0.0	0.0
6	161639066427	0.0	0.0	0.0
7	20089039656	15.0	0.0	15.0
8	181839069304	13.0	0.0	13.0
9	181839063716	13.5	0.0	13.5
10	171739073371	0.0	0.0	0.0
11	171739068436	11.5	0.0	11.5
12	171739070608	0.0	0.0	0.0
13	161739063182	0.0	0.0	0.0
14	21059063853	12.0	0.0	12.0
15	181839066474	12.5	0.0	12.5
16	181839071917	0.0	0.0	0.0
17	181839067146	12.5	0.0	12.5
18	181839068250	17.0	0.0	17.0
19	181839068915	19.0	0.0	19.0
20	171739072699	14.5	0.0	14.5
21	171739070711	0.0	0.0	0.0
22	181839067457	0.0	0.0	0.0
23	2198825745	15.5	0.0	15.5
24	171739069690	0.0	0.0	0.0
25	181839067975	13.0	0.0	13.0
26	171739069723	0.0	0.0	0.0
27	20129050014	0.0	0.0	0.0
28	211339051419	12.0	0.0	12.0

**Filière:** Génie Mécanique  
énergétique

**Niveau:**

**Matière:** Anglais technique et Terminologie / Section A / 2

**PV de délibération par matière**

#	Matricule	Examen	CC	MG
1	181839065187	0.0	0.0	0.0
2	171739069698	0.0	0.0	0.0
3	171739069797	0.0	0.0	0.0
4	181839072961	0.0	0.0	0.0
5	171739065450	0.0	0.0	0.0
6	181839066207	14.0	0.0	14.0
7	181839067589	14.5	0.0	14.5
8	21079066478	19.5	0.0	19.5
9	171739072743	12.0	0.0	12.0
10	181839067147	16.5	0.0	16.5
11	181839068988	0.0	0.0	0.0
12	171739070759	13.0	0.0	13.0
13	171739074322	17.0	0.0	17.0
14	181839063041	15.0	0.0	15.0
15	12124018289	15.0	0.0	15.0
16	2199931444	15.5	0.0	15.5
17	171739068563	14.0	0.0	14.0
18	171739070619	0.0	0.0	0.0
19	161639071231	0.0	0.0	0.0
20	181839069884	15.0	0.0	15.0
21	181839066530	14.5	0.0	14.5
22	181839067906	13.0	0.0	13.0
23	181839067980	14.0	0.0	14.0
24	171739072369	0.0	0.0	0.0
25	171739070124	10.0	0.0	10.0
26	191539062827	0.0	0.0	0.0
27	211339061634	0.0	0.0	0.0
28	21129058326	15.0	0.0	15.0

**Filière:** Génie Mécanique  
énergétique

**Niveau:**

**Matière:** Anglais technique et Terminologie / Section A / 3

**PV de délibération par matière**

#	Matricule	Examen	CC	MG
1	171739069710	9.0	0.0	9.0
2	171739069803	14.0	0.0	14.0
3	171739070152	0.0	0.0	0.0
4	181839067884	13.0	0.0	13.0
5	181839069043	18.0	0.0	18.0
6	171739068731	0.0	0.0	0.0
7	171739070764	0.0	0.0	0.0
8	21079069412	13.5	0.0	13.5
9	171739073189	0.0	0.0	0.0
10	171739075991	0.0	0.0	0.0
11	171739067239	0.0	0.0	0.0
12	181839067455	13.5	0.0	13.5
13	181839066628	0.0	0.0	0.0
14	161639078030	10.5	0.0	10.5
15	181839067970	0.0	0.0	0.0
16	181839065240	19.0	0.0	19.0
17	181839079945	15.5	0.0	15.5
18	181839066384	0.0	0.0	0.0
19	181839068885	15.0	0.0	15.0
20	181839070265	16.0	0.0	16.0
21	171739083583	0.0	0.0	0.0
22	181839068248	11.0	0.0	11.0
23	181839063176	16.5	0.0	16.5
24	171739070669	0.0	0.0	0.0
25	171739072665	14.0	0.0	14.0
26	211339048730	16.5	0.0	16.5
27	161539077498	0.0	0.0	0.0
28	20129047253	0.0	0.0	0.0
29	181439062220	14.5	0.0	14.5

**Filière:** Génie Mécanique  
énergétique

**Niveau:**

**Matière:** Electrotechnique Appliquée / Section A / 1

**PV de délibération par matière**

#	Matricule	Examen	CC	MG
1	181839067885	18.0	0.0	18.0
2	181839065624	20.0	0.0	20.0
3	171739072184	16.0	0.0	16.0
4	181439064830	19.0	0.0	19.0
5	171739070052	18.0	0.0	18.0
6	161639066427	16.0	0.0	16.0
7	20089039656	18.0	0.0	18.0
8	181839069304	18.0	0.0	18.0
9	181839063716	14.0	0.0	14.0
10	171739073371	8.0	0.0	8.0
11	171739068436	18.0	0.0	18.0
12	171739070608	20.0	0.0	20.0
13	161739063182	0.0	0.0	0.0
14	21059063853	8.0	0.0	8.0
15	181839066474	19.0	0.0	19.0
16	181839071917	0.0	0.0	0.0
17	181839067146	16.0	0.0	16.0
18	181839068250	17.0	0.0	17.0
19	181839068915	16.0	0.0	16.0
20	171739072699	18.0	0.0	18.0
21	171739070711	16.0	0.0	16.0
22	181839067457	0.0	0.0	0.0
23	2198825745	18.0	0.0	18.0
24	171739069690	20.0	0.0	20.0
25	181839067975	18.0	0.0	18.0
26	171739069723	17.0	0.0	17.0
27	20129050014	12.0	0.0	12.0
28	211339051419	18.0	0.0	18.0

**Filière:** Génie Mécanique  
énergétique

**Niveau:**

**Matière:** Electrotechnique Appliquée / Section A / 2

**PV de délibération par matière**

#	Matricule	Examen	CC	MG
1	181839065187	0.0	0.0	0.0
2	171739069698	20.0	0.0	20.0
3	171739069797	16.0	0.0	16.0
4	181839072961	0.0	0.0	0.0
5	171739065450	14.0	0.0	14.0
6	181839066207	18.0	0.0	18.0
7	181839067589	20.0	0.0	20.0
8	21079066478	20.0	0.0	20.0
9	171739072743	16.0	0.0	16.0
10	181839067147	12.0	0.0	12.0
11	181839068988	0.0	0.0	0.0
12	171739070759	16.0	0.0	16.0
13	171739074322	16.0	0.0	16.0
14	181839063041	18.0	0.0	18.0
15	12124018289	16.0	0.0	16.0
16	2199931444	20.0	0.0	20.0
17	171739068563	12.0	0.0	12.0
18	171739070619	16.0	0.0	16.0
19	161639071231	10.0	0.0	10.0
20	181839069884	8.0	0.0	8.0
21	181839066530	18.0	0.0	18.0
22	181839067906	14.0	0.0	14.0
23	181839067980	18.0	0.0	18.0
24	171739072369	16.0	0.0	16.0
25	171739070124	16.0	0.0	16.0
26	191539062827	16.0	0.0	16.0
27	211339061634	0.0	0.0	0.0
28	21129058326	16.0	0.0	16.0

**Filière:** Génie Mécanique  
énergétique

**Niveau:**

**Matière:** Electrotechnique Appliquée / Section A / 3

**PV de délibération par matière**

#	Matricule	Examen	CC	MG
1	171739069710	10.0	0.0	10.0
2	171739069803	17.0	0.0	17.0
3	171739070152	16.0	0.0	16.0
4	181839067884	18.0	0.0	18.0
5	181839069043	14.0	0.0	14.0
6	171739068731	16.0	0.0	16.0
7	171739070764	12.0	0.0	12.0
8	21079069412	16.0	0.0	16.0
9	171739073189	0.0	0.0	0.0
10	171739075991	11.0	0.0	11.0
11	171739067239	0.0	0.0	0.0
12	181839067455	0.0	0.0	0.0
13	181839066628	0.0	0.0	0.0
14	161639078030	10.0	0.0	10.0
15	181839067970	0.0	0.0	0.0
16	181839065240	12.0	0.0	12.0
17	181839079945	18.0	0.0	18.0
18	181839066384	0.0	0.0	0.0
19	181839068885	16.0	0.0	16.0
20	181839070265	10.0	0.0	10.0
21	171739083583	0.0	0.0	0.0
22	181839068248	6.0	0.0	6.0
23	181839063176	18.0	0.0	18.0
24	171739070669	16.0	0.0	16.0
25	171739072665	14.0	0.0	14.0
26	211339048730	16.0	0.0	16.0
27	161539077498	10.0	0.0	10.0
28	20129047253	16.0	0.0	16.0
29	181439062220	16.0	0.0	16.0

**Filière:** Génie Mécanique  
énergétique

**Niveau:**

**Matière:** Instrumentation et mesures / Section A / 1

**PV de délibération par matière**

#	Matricule	Examen	CC	MG
1	181839067885	11.5	12.75	12.0
2	181839065624	10.5	12.75	11.4
3	171739072184	0.0	9.2	3.68
4	181439064830	18.0	12.75	15.9
5	171739070052	0.0	8.8	3.52
6	161639066427	0.0	10.6	4.24
7	20089039656	3.0	13.0	7.0
8	181839069304	11.5	12.75	12.0
9	181839063716	14.0	12.5	13.4
10	171739073371	0.0	9.8	3.92
11	171739068436	15.5	12.5	14.3
12	171739070608	0.0	10.6	4.24
13	161739063182	0.0	0.0	0.0
14	21059063853	1.0	7.0	3.4
15	181839066474	14.0	14.0	14.0
16	181839071917	0.0	0.0	0.0
17	181839067146	4.0	12.75	7.5
18	181839068250	10.0	13.75	11.5
19	181839068915	17.0	14.5	16.0
20	171739072699	12.0	12.75	12.3
21	171739070711	0.0	0.0	0.0
22	181839067457	0.0	0.0	0.0
23	2198825745	12.5	14.0	13.1
24	171739069690	0.0	9.2	3.68
25	181839067975	11.5	13.75	12.4
26	171739069723	0.0	12.2	4.88
27	20129050014	0.0	10.0	4.0
28	211339051419	12.5	13.0	12.7

**Filière:** Génie Mécanique  
énergétique

**Niveau:**

**Matière:** Instrumentation et mesures / Section A / 2

**PV de délibération par matière**

#	Matricule	Examen	CC	MG
1	181839065187	0.0	0.0	0.0
2	171739069698	0.0	8.0	3.2
3	171739069797	0.0	9.0	3.6
4	181839072961	0.0	0.0	0.0
5	171739065450	0.0	8.4	3.36
6	181839066207	10.5	11.75	11.0
7	181839067589	15.5	15.0	15.3
8	21079066478	0.0	13.5	5.4
9	171739072743	0.0	12.2	4.88
10	181839067147	9.0	16.25	11.9
11	181839068988	0.0	0.0	0.0
12	171739070759	0.0	9.4	3.76
13	171739074322	14.5	16.25	15.2
14	181839063041	15.0	15.0	15.0
15	12124018289	15.5	14.25	15.0
16	2199931444	8.5	17.0	11.9
17	171739068563	0.0	10.4	4.16
18	171739070619	0.0	10.2	4.08
19	161639071231	0.0	9.0	3.6
20	181839069884	0.0	0.0	0.0
21	181839066530	17.0	12.25	15.1
22	181839067906	12.0	14.75	13.1
23	181839067980	10.0	15.0	12.0
24	171739072369	0.0	11.0	4.4
25	171739070124	4.5	14.5	8.5
26	191539062827	0.0	14.6	5.84
27	211339061634	0.0	0.0	0.0
28	21129058326	16.5	10.0	13.9



**Filière:** Génie Mécanique  
énergétique

**Niveau:**

**Matière:** Instrumentation et mesures / Section A / 3

**PV de délibération par matière**

#	Matricule	Examen	CC	MG
1	171739069710	0.0	0.0	0.0
2	171739069803	0.0	8.0	3.2
3	171739070152	0.0	10.6	4.24
4	181839067884	18.0	14.0	16.4
5	181839069043	2.0	12.0	6.0
6	171739068731	0.0	11.4	4.56
7	171739070764	0.0	12.4	4.96
8	21079069412	7.5	15.0	10.5
9	171739073189	0.0	0.0	0.0
10	171739075991	0.0	10.4	4.16
11	171739067239	0.0	0.0	0.0
12	181839067455	0.0	14.0	5.6
13	181839066628	0.0	0.0	0.0
14	161639078030	0.0	11.2	4.48
15	181839067970	0.0	13.0	5.2
16	181839065240	9.0	12.5	10.4
17	181839079945	16.0	12.0	14.4
18	181839066384	0.0	0.0	0.0
19	181839068885	15.0	12.0	13.8
20	181839070265	11.0	12.25	11.5
21	171739083583	0.0	0.0	0.0
22	181839068248	14.5	13.0	13.9
23	181839063176	14.0	12.25	13.3
24	171739070669	0.0	9.0	3.6
25	171739072665	8.5	12.25	10.0
26	211339048730	11.0	11.5	11.2
27	161539077498	0.0	11.0	4.4
28	20129047253	0.0	10.4	4.16
29	181439062220	13.5	13.0	13.3

**Filière:** Génie Mécanique  
énergétique

**Niveau:**

**Matière:** Machines Thermiques / Section A / 1

**PV de délibération par matière**

#	Matricule	Examen	CC	MG
1	181839067885	5.0	7.5	6.0
2	181839065624	2.5	8.0	4.7
3	171739072184	3.0	7.5	4.8
4	181439064830	13.0	6.0	10.2
5	171739070052	6.5	8.0	7.1
6	161639066427	0.0	0.0	0.0
7	20089039656	9.0	12.5	10.4
8	181839069304	7.5	10.0	8.5
9	181839063716	12.0	8.5	10.6
10	171739073371	0.0	0.0	0.0
11	171739068436	13.0	10.0	11.8
12	171739070608	0.0	0.0	0.0
13	161739063182	0.0	0.0	0.0
14	21059063853	8.0	6.5	7.4
15	181839066474	11.0	10.0	10.6
16	181839071917	0.0	0.0	0.0
17	181839067146	4.0	7.5	5.4
18	181839068250	7.0	10.0	8.2
19	181839068915	5.0	10.0	7.0
20	171739072699	5.0	10.0	7.0
21	171739070711	0.0	0.0	0.0
22	181839067457	0.0	0.0	0.0
23	2198825745	10.0	11.0	10.4
24	171739069690	4.5	0.0	2.7
25	181839067975	10.0	7.5	9.0
26	171739069723	0.0	0.0	0.0
27	20129050014	0.0	0.0	0.0
28	211339051419	13.5	10.0	12.1

**Filière:** Génie Mécanique  
énergétique

**Niveau:**

**Matière:** Machines Thermiques / Section A / 2

**PV de délibération par matière**

#	Matricule	Examen	CC	MG
1	181839065187	0.0	0.0	0.0
2	171739069698	3.5	0.0	2.1
3	171739069797	2.5	0.0	1.5
4	181839072961	0.0	0.0	0.0
5	171739065450	0.0	0.0	0.0
6	181839066207	14.0	9.0	12.0
7	181839067589	8.0	12.5	9.8
8	21079066478	15.0	12.5	14.0
9	171739072743	1.0	7.5	3.6
10	181839067147	5.5	8.0	6.5
11	181839068988	0.0	0.0	0.0
12	171739070759	5.0	10.0	7.0
13	171739074322	5.0	11.5	7.6
14	181839063041	5.0	11.5	7.6
15	12124018289	12.0	12.5	12.2
16	2199931444	4.0	10.0	6.4
17	171739068563	5.0	9.0	6.6
18	171739070619	0.0	0.0	0.0
19	161639071231	0.0	0.0	0.0
20	181839069884	6.5	11.0	8.3
21	181839066530	2.5	6.0	3.9
22	181839067906	10.0	8.5	9.4
23	181839067980	4.0	8.5	5.8
24	171739072369	2.0	7.5	4.2
25	171739070124	4.0	9.5	6.2
26	191539062827	0.0	0.0	0.0
27	211339061634	0.0	0.0	0.0
28	21129058326	7.5	8.5	7.9

**Filière:** Génie Mécanique  
énergétique

**Niveau:**

**Matière:** Machines Thermiques / Section A / 3

**PV de délibération par matière**

#	Matricule	Examen	CC	MG
1	171739069710	4.5	0.0	2.7
2	171739069803	3.5	0.0	2.1
3	171739070152	6.0	2.5	4.6
4	181839067884	0.0	3.0	1.2
5	181839069043	7.5	8.0	7.7
6	171739068731	9.0	8.5	8.8
7	171739070764	7.5	8.5	7.9
8	21079069412	11.5	10.0	10.9
9	171739073189	0.0	0.0	0.0
10	171739075991	0.0	9.0	3.6
11	171739067239	0.0	0.0	0.0
12	181839067455	1.0	8.0	3.8
13	181839066628	0.0	0.0	0.0
14	161639078030	2.5	11.0	5.9
15	181839067970	0.0	7.5	3.0
16	181839065240	9.0	9.5	9.2
17	181839079945	7.5	10.0	8.5
18	181839066384	0.0	0.0	0.0
19	181839068885	10.0	5.5	8.2
20	181839070265	7.0	11.5	8.8
21	171739083583	0.0	0.0	0.0
22	181839068248	2.5	9.5	5.3
23	181839063176	14.5	9.5	12.5
24	171739070669	0.0	0.0	0.0
25	171739072665	5.0	8.0	6.2
26	211339048730	4.0	6.0	4.8
27	161539077498	1.0	0.0	0.6
28	20129047253	5.5	0.0	3.3
29	181439062220	12.0	7.0	10.0

**Filière:** Génie Mécanique  
énergétique

**Niveau:**

**Matière:** Maintenance Industriel / Section A / 1

**PV de délibération par matière**

#	Matricule	Examen	CC	MG
1	181839067885	6.0	0.0	6.0
2	181839065624	6.0	0.0	6.0
3	171739072184	0.0	0.0	0.0
4	181439064830	5.0	0.0	5.0
5	171739070052	0.0	0.0	0.0
6	161639066427	0.0	0.0	0.0
7	20089039656	8.5	0.0	8.5
8	181839069304	7.5	0.0	7.5
9	181839063716	5.0	0.0	5.0
10	171739073371	0.0	0.0	0.0
11	171739068436	8.5	0.0	8.5
12	171739070608	0.0	0.0	0.0
13	161739063182	0.0	0.0	0.0
14	21059063853	14.5	0.0	14.5
15	181839066474	6.0	0.0	6.0
16	181839071917	0.0	0.0	0.0
17	181839067146	6.0	0.0	6.0
18	181839068250	7.5	0.0	7.5
19	181839068915	7.5	0.0	7.5
20	171739072699	8.0	0.0	8.0
21	171739070711	0.0	0.0	0.0
22	181839067457	0.0	0.0	0.0
23	2198825745	0.0	0.0	0.0
24	171739069690	0.0	0.0	0.0
25	181839067975	5.0	0.0	5.0
26	171739069723	0.0	0.0	0.0
27	20129050014	0.0	0.0	0.0
28	211339051419	4.5	0.0	4.5

**Filière:** Génie Mécanique  
énergétique

**Niveau:**

**Matière:** Maintenance Industriel / Section A / 2

**PV de délibération par matière**

#	Matricule	Examen	CC	MG
1	181839065187	0.0	0.0	0.0
2	171739069698	0.0	0.0	0.0
3	171739069797	0.0	0.0	0.0
4	181839072961	0.0	0.0	0.0
5	171739065450	0.0	0.0	0.0
6	181839066207	5.5	0.0	5.5
7	181839067589	4.5	0.0	4.5
8	21079066478	8.0	0.0	8.0
9	171739072743	0.0	0.0	0.0
10	181839067147	4.0	0.0	4.0
11	181839068988	0.0	0.0	0.0
12	171739070759	0.0	0.0	0.0
13	171739074322	6.0	0.0	6.0
14	181839063041	11.0	0.0	11.0
15	12124018289	14.0	0.0	14.0
16	2199931444	0.0	0.0	0.0
17	171739068563	0.0	0.0	0.0
18	171739070619	0.0	0.0	0.0
19	161639071231	0.0	0.0	0.0
20	181839069884	11.0	0.0	11.0
21	181839066530	7.0	0.0	7.0
22	181839067906	6.0	0.0	6.0
23	181839067980	9.0	0.0	9.0
24	171739072369	0.0	0.0	0.0
25	171739070124	5.0	0.0	5.0
26	191539062827	0.0	0.0	0.0
27	211339061634	0.0	0.0	0.0
28	21129058326	16.5	0.0	16.5

**Filière:** Génie Mécanique  
énergétique

**Niveau:**

**Matière:** Maintenance Industriel / Section A / 3

**PV de délibération par matière**

#	Matricule	Examen	CC	MG
1	171739069710	0.0	0.0	0.0
2	171739069803	0.0	0.0	0.0
3	171739070152	0.0	0.0	0.0
4	181839067884	6.0	0.0	6.0
5	181839069043	4.5	0.0	4.5
6	171739068731	0.0	0.0	0.0
7	171739070764	0.0	0.0	0.0
8	21079069412	5.0	0.0	5.0
9	171739073189	0.0	0.0	0.0
10	171739075991	0.0	0.0	0.0
11	171739067239	0.0	0.0	0.0
12	181839067455	6.0	0.0	6.0
13	181839066628	6.0	0.0	6.0
14	161639078030	0.0	0.0	0.0
15	181839067970	0.0	0.0	0.0
16	181839065240	0.0	0.0	0.0
17	181839079945	10.0	0.0	10.0
18	181839066384	0.0	0.0	0.0
19	181839068885	4.0	0.0	4.0
20	181839070265	7.0	0.0	7.0
21	171739083583	0.0	0.0	0.0
22	181839068248	5.0	0.0	5.0
23	181839063176	8.0	0.0	8.0
24	171739070669	0.0	0.0	0.0
25	171739072665	6.0	0.0	6.0
26	211339048730	3.0	0.0	3.0
27	161539077498	0.0	0.0	0.0
28	20129047253	0.0	0.0	0.0
29	181439062220	6.0	0.0	6.0

**Filière:** Génie Mécanique  
énergétique

**Niveau:**

**Matière:** Mécanique des Fluides Approfondie / Section A / 1

**PV de délibération par matière**

#	Matricule	Examen	CC	MG
1	181839067885	0.0	12.5	5.0
2	181839065624	0.0	10.0	4.0
3	171739072184	0.0	6.5	2.6
4	181439064830	2.0	7.5	4.2
5	171739070052	0.0	4.0	1.6
6	161639066427	0.0	0.0	0.0
7	20089039656	20.0	11.0	16.4
8	181839069304	14.0	11.5	13.0
9	181839063716	6.0	4.0	5.2
10	171739073371	0.0	0.0	0.0
11	171739068436	2.0	18.0	8.4
12	171739070608	0.0	0.0	0.0
13	161739063182	0.0	0.0	0.0
14	21059063853	14.0	20.0	16.4
15	181839066474	0.0	14.0	5.6
16	181839071917	0.0	0.0	0.0
17	181839067146	0.0	11.0	4.4
18	181839068250	4.0	14.0	8.0
19	181839068915	2.0	14.0	6.8
20	171739072699	0.0	11.25	4.5
21	171739070711	0.0	0.0	0.0
22	181839067457	0.0	0.0	0.0
23	2198825745	8.0	8.0	8.0
24	171739069690	0.0	0.0	0.0
25	181839067975	2.0	11.5	5.8
26	171739069723	0.0	0.0	0.0
27	20129050014	0.0	0.0	0.0
28	211339051419	0.0	11.5	4.6



**Filière:** Génie Mécanique  
énergétique

**Niveau:**

**Matière:** Mécanique des Fluides Approfondie / Section A / 2

**PV de délibération par matière**

#	Matricule	Examen	CC	MG
1	181839065187	0.0	0.0	0.0
2	171739069698	0.0	0.0	0.0
3	171739069797	0.0	0.0	0.0
4	181839072961	0.0	0.0	0.0
5	171739065450	0.0	0.0	0.0
6	181839066207	8.0	18.0	12.0
7	181839067589	9.0	11.0	9.8
8	21079066478	5.0	11.5	7.6
9	171739072743	2.0	7.25	4.1
10	181839067147	0.0	11.0	4.4
11	181839068988	0.0	0.0	0.0
12	171739070759	0.0	9.0	3.6
13	171739074322	2.0	10.0	5.2
14	181839063041	0.0	14.5	5.8
15	12124018289	0.0	11.0	4.4
16	2199931444	4.0	18.0	9.6
17	171739068563	0.0	17.5	7.0
18	171739070619	0.0	0.0	0.0
19	161639071231	0.0	0.0	0.0
20	181839069884	17.0	11.0	14.6
21	181839066530	0.0	11.0	4.4
22	181839067906	0.0	14.0	5.6
23	181839067980	0.0	14.0	5.6
24	171739072369	4.0	9.5	6.2
25	171739070124	2.0	14.0	6.8
26	191539062827	0.0	0.0	0.0
27	211339061634	0.0	0.0	0.0
28	21129058326	0.0	14.0	5.6

**Filière:** Génie Mécanique  
énergétique

**Niveau:**

**Matière:** Mécanique des Fluides Approfondie / Section A / 3

**PV de délibération par matière**

#	Matricule	Examen	CC	MG
1	171739069710	0.0	0.0	0.0
2	171739069803	0.0	0.0	0.0
3	171739070152	0.0	9.5	3.8
4	181839067884	2.0	12.5	6.2
5	181839069043	0.0	8.5	3.4
6	171739068731	12.0	15.5	13.4
7	171739070764	6.0	8.0	6.8
8	21079069412	0.0	12.5	5.0
9	171739073189	0.0	0.0	0.0
10	171739075991	0.0	6.0	2.4
11	171739067239	0.0	0.0	0.0
12	181839067455	0.0	0.0	0.0
13	181839066628	0.0	0.0	0.0
14	161639078030	2.0	12.0	6.0
15	181839067970	0.0	0.0	0.0
16	181839065240	0.0	16.5	6.6
17	181839079945	16.0	14.0	15.2
18	181839066384	0.0	0.0	0.0
19	181839068885	0.0	14.5	5.8
20	181839070265	5.0	11.0	7.4
21	171739083583	0.0	0.0	0.0
22	181839068248	0.0	13.5	5.4
23	181839063176	2.0	4.0	2.8
24	171739070669	0.0	0.0	0.0
25	171739072665	2.0	1.0	1.6
26	211339048730	0.0	11.0	4.4
27	161539077498	0.0	0.0	0.0
28	20129047253	0.0	0.0	0.0
29	181439062220	4.0	8.5	5.8

**Filière:** Génie Mécanique  
énergétique

**Niveau:**

**Matière:** Méthodes Numériques Approfondies / Section A / 1

**PV de délibération par matière**

#	Matricule	Examen	CC	MG
1	181839067885	11.0	10.5	10.8
2	181839065624	7.5	10.5	8.7
3	171739072184	5.5	10.0	7.3
4	181439064830	5.5	10.0	7.3
5	171739070052	10.5	6.0	8.7
6	161639066427	0.0	11.2	4.48
7	20089039656	10.0	10.0	10.0
8	181839069304	5.5	10.0	7.3
9	181839063716	12.5	5.0	9.5
10	171739073371	0.0	0.0	0.0
11	171739068436	11.0	7.0	9.4
12	171739070608	0.0	0.0	0.0
13	161739063182	0.0	0.0	0.0
14	21059063853	10.0	3.0	7.2
15	181839066474	10.5	7.0	9.1
16	181839071917	0.0	0.0	0.0
17	181839067146	8.5	15.0	11.1
18	181839068250	12.0	13.0	12.4
19	181839068915	6.0	16.0	10.0
20	171739072699	5.5	6.0	5.7
21	171739070711	0.0	0.0	0.0
22	181839067457	0.0	10.0	4.0
23	2198825745	10.5	7.0	9.1
24	171739069690	4.0	0.0	2.4
25	181839067975	11.5	16.0	13.3
26	171739069723	0.0	0.0	0.0
27	20129050014	0.0	0.0	0.0
28	211339051419	2.0	6.0	3.6

**Filière:** Génie Mécanique  
énergétique

**Niveau:**

**Matière:** Méthodes Numériques Approfondies / Section A / 2

**PV de délibération par matière**

#	Matricule	Examen	CC	MG
1	181839065187	0.0	0.0	0.0
2	171739069698	5.0	0.0	3.0
3	171739069797	0.0	0.0	0.0
4	181839072961	0.0	0.0	0.0
5	171739065450	0.0	0.0	0.0
6	181839066207	11.0	6.0	9.0
7	181839067589	10.0	2.0	6.8
8	21079066478	11.0	10.0	10.6
9	171739072743	0.0	10.4	4.16
10	181839067147	5.0	16.0	9.4
11	181839068988	0.0	0.0	0.0
12	171739070759	10.5	8.0	9.5
13	171739074322	6.5	5.0	5.9
14	181839063041	10.0	2.5	7.0
15	12124018289	10.0	10.0	10.0
16	2199931444	0.0	17.0	6.8
17	171739068563	10.5	11.0	10.7
18	171739070619	0.0	0.0	0.0
19	161639071231	0.0	0.0	0.0
20	181839069884	5.0	7.0	5.8
21	181839066530	5.0	6.0	5.4
22	181839067906	5.0	15.0	9.0
23	181839067980	7.0	11.0	8.6
24	171739072369	0.0	11.2	4.48
25	171739070124	6.5	16.0	10.3
26	191539062827	0.0	0.0	0.0
27	211339061634	0.0	0.0	0.0
28	21129058326	5.0	15.0	9.0

**Filière:** Génie Mécanique  
énergétique

**Niveau:**

**Matière:** Méthodes Numériques Approfondies / Section A / 3

**PV de délibération par matière**

#	Matricule	Examen	CC	MG
1	171739069710	5.0	0.0	3.0
2	171739069803	6.0	0.0	3.6
3	171739070152	10.0	6.0	8.4
4	181839067884	10.0	12.0	10.8
5	181839069043	8.0	10.0	8.8
6	171739068731	6.5	12.0	8.7
7	171739070764	11.0	7.0	9.4
8	21079069412	10.0	7.0	8.8
9	171739073189	0.0	0.0	0.0
10	171739075991	0.0	12.0	4.8
11	171739067239	0.0	0.0	0.0
12	181839067455	0.0	13.0	5.2
13	181839066628	0.0	0.0	0.0
14	161639078030	11.5	7.0	9.7
15	181839067970	0.0	10.0	4.0
16	181839065240	10.0	10.0	10.0
17	181839079945	11.0	10.0	10.6
18	181839066384	0.0	0.0	0.0
19	181839068885	8.0	10.0	8.8
20	181839070265	10.0	7.0	8.8
21	171739083583	0.0	0.0	0.0
22	181839068248	9.0	16.0	11.8
23	181839063176	6.5	11.0	8.3
24	171739070669	0.0	11.4	4.56
25	171739072665	9.0	12.0	10.2
26	211339048730	7.0	8.0	7.4
27	161539077498	10.0	10.0	10.0
28	20129047253	0.0	0.0	0.0
29	181439062220	5.0	15.0	9.0

**Filière:** Génie Mécanique  
énergétique

**Niveau:**

**Matière:** TP Machines Thermiques / Section A / 1

**PV de délibération par matière**

#	Matricule	Examen	CC	MG
1	181839067885	0.0	16.25	16.25
2	181839065624	0.0	14.0	14.0
3	171739072184	0.0	12.75	12.75
4	181439064830	0.0	13.0	13.0
5	171739070052	0.0	12.25	12.25
6	161639066427	0.0	12.25	12.25
7	20089039656	0.0	13.0	13.0
8	181839069304	0.0	14.75	14.75
9	181839063716	0.0	16.5	16.5
10	171739073371	0.0	12.0	12.0
11	171739068436	0.0	15.5	15.5
12	171739070608	0.0	13.5	13.5
13	161739063182	0.0	0.0	0.0
14	21059063853	0.0	7.25	7.25
15	181839066474	0.0	16.5	16.5
16	181839071917	0.0	0.0	0.0
17	181839067146	0.0	15.0	15.0
18	181839068250	0.0	16.25	16.25
19	181839068915	0.0	16.0	16.0
20	171739072699	0.0	14.75	14.75
21	171739070711	0.0	10.5	10.5
22	181839067457	0.0	0.0	0.0
23	2198825745	0.0	13.0	13.0
24	171739069690	0.0	11.5	11.5
25	181839067975	0.0	16.25	16.25
26	171739069723	0.0	11.75	11.75
27	20129050014	0.0	12.5	12.5
28	211339051419	0.0	13.0	13.0

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**Filière:** Génie Mécanique  
énergétique

**Niveau:**

**Matière:** TP Machines Thermiques / Section A / 2

**PV de délibération par matière**

#	Matricule	Examen	CC	MG
1	181839065187	0.0	0.0	0.0
2	171739069698	0.0	0.0	0.0
3	171739069797	0.0	0.0	0.0
4	181839072961	0.0	0.0	0.0
5	171739065450	0.0	0.0	0.0
6	181839066207	0.0	16.5	16.5
7	181839067589	0.0	15.75	15.75
8	21079066478	0.0	14.25	14.25
9	171739072743	0.0	0.0	0.0
10	181839067147	0.0	14.25	14.25
11	181839068988	0.0	8.0	8.0
12	171739070759	0.0	0.0	0.0
13	171739074322	0.0	16.0	16.0
14	181839063041	0.0	14.25	14.25
15	12124018289	0.0	15.0	15.0
16	2199931444	0.0	16.5	16.5
17	171739068563	0.0	0.0	0.0
18	171739070619	0.0	0.0	0.0
19	161639071231	0.0	0.0	0.0
20	181839069884	0.0	14.0	14.0
21	181839066530	0.0	17.0	17.0
22	181839067906	0.0	16.25	16.25
23	181839067980	0.0	16.25	16.25
24	171739072369	0.0	0.0	0.0
25	171739070124	0.0	14.25	14.25
26	191539062827	0.0	0.0	0.0
27	211339061634	0.0	0.0	0.0
28	21129058326	0.0	14.25	14.25



**Filière:** Génie Mécanique  
énergétique

**Niveau:**

**Matière:** TP Machines Thermiques / Section A / 3

**PV de délibération par matière**

#	Matricule	Examen	CC	MG
1	171739069710	0.0	10.0	10.0
2	171739069803	0.0	10.75	10.75
3	171739070152	0.0	12.0	12.0
4	181839067884	0.0	14.5	14.5
5	181839069043	0.0	12.75	12.75
6	171739068731	0.0	12.0	12.0
7	171739070764	0.0	13.0	13.0
8	21079069412	0.0	14.75	14.75
9	171739073189	0.0	0.0	0.0
10	171739075991	0.0	12.0	12.0
11	171739067239	0.0	0.0	0.0
12	181839067455	0.0	13.75	13.75
13	181839066628	0.0	0.0	0.0
14	161639078030	0.0	12.0	12.0
15	181839067970	0.0	13.75	13.75
16	181839065240	0.0	13.5	13.5
17	181839079945	0.0	14.75	14.75
18	181839066384	0.0	0.0	0.0
19	181839068885	0.0	12.75	12.75
20	181839070265	0.0	13.75	13.75
21	171739083583	0.0	0.0	0.0
22	181839068248	0.0	6.75	6.75
23	181839063176	0.0	12.75	12.75
24	171739070669	0.0	12.0	12.0
25	171739072665	0.0	14.75	14.75
26	211339048730	0.0	14.75	14.75
27	161539077498	0.0	11.5	11.5
28	20129047253	0.0	11.25	11.25
29	181439062220	0.0	14.75	14.75

**Filière:** Génie Mécanique  
énergétique

**Niveau:**

**Matière:** TP MDF / Section A / 1

**PV de délibération par matière**

#	Matricule	Examen	CC	MG
1	181839067885	0.0	15.25	15.25
2	181839065624	0.0	14.25	14.25
3	171739072184	0.0	11.5	11.5
4	181439064830	0.0	14.75	14.75
5	171739070052	0.0	12.5	12.5
6	161639066427	0.0	12.5	12.5
7	20089039656	0.0	14.75	14.75
8	181839069304	0.0	14.25	14.25
9	181839063716	0.0	13.5	13.5
10	171739073371	0.0	12.0	12.0
11	171739068436	0.0	13.5	13.5
12	171739070608	0.0	13.0	13.0
13	161739063182	0.0	0.0	0.0
14	21059063853	0.0	0.0	0.0
15	181839066474	0.0	13.5	13.5
16	181839071917	0.0	0.0	0.0
17	181839067146	0.0	14.25	14.25
18	181839068250	0.0	15.25	15.25
19	181839068915	0.0	15.25	15.25
20	171739072699	0.0	14.25	14.25
21	171739070711	0.0	0.0	0.0
22	181839067457	0.0	0.0	0.0
23	2198825745	0.0	15.25	15.25
24	171739069690	0.0	12.0	12.0
25	181839067975	0.0	15.25	15.25
26	171739069723	0.0	11.5	11.5
27	20129050014	0.0	13.0	13.0
28	211339051419	0.0	14.75	14.75

**Filière:** Génie Mécanique  
énergétique

**Niveau:**

**Matière:** TP MDF / Section A / 2

**PV de délibération par matière**

#	Matricule	Examen	CC	MG
1	181839065187	0.0	0.0	0.0
2	171739069698	0.0	12.5	12.5
3	171739069797	0.0	11.5	11.5
4	181839072961	0.0	0.0	0.0
5	171739065450	0.0	12.0	12.0
6	181839066207	0.0	18.25	18.25
7	181839067589	0.0	15.0	15.0
8	21079066478	0.0	14.5	14.5
9	171739072743	0.0	12.5	12.5
10	181839067147	0.0	15.0	15.0
11	181839068988	0.0	0.0	0.0
12	171739070759	0.0	12.5	12.5
13	171739074322	0.0	15.0	15.0
14	181839063041	0.0	14.5	14.5
15	12124018289	0.0	14.5	14.5
16	2199931444	0.0	18.25	18.25
17	171739068563	0.0	14.5	14.5
18	171739070619	0.0	14.5	14.5
19	161639071231	0.0	12.0	12.0
20	181839069884	0.0	14.25	14.25
21	181839066530	0.0	16.5	16.5
22	181839067906	0.0	13.25	13.25
23	181839067980	0.0	13.25	13.25
24	171739072369	0.0	10.0	10.0
25	171739070124	0.0	13.25	13.25
26	191539062827	0.0	12.0	12.0
27	211339061634	0.0	0.0	0.0
28	21129058326	0.0	16.25	16.25

**Filière:** Génie Mécanique  
énergétique

**Niveau:**

**Matière:** TP MDF / Section A / 3

**PV de délibération par matière**

#	Matricule	Examen	CC	MG
1	171739069710	0.0	0.0	0.0
2	171739069803	0.0	0.0	0.0
3	171739070152	0.0	0.0	0.0
4	181839067884	0.0	15.25	15.25
5	181839069043	0.0	13.0	13.0
6	171739068731	0.0	0.0	0.0
7	171739070764	0.0	0.0	0.0
8	21079069412	0.0	14.75	14.75
9	171739073189	0.0	0.0	0.0
10	171739075991	0.0	0.0	0.0
11	171739067239	0.0	0.0	0.0
12	181839067455	0.0	15.25	15.25
13	181839066628	0.0	0.0	0.0
14	161639078030	0.0	0.0	0.0
15	181839067970	0.0	7.25	7.25
16	181839065240	0.0	13.0	13.0
17	181839079945	0.0	14.75	14.75
18	181839066384	0.0	0.0	0.0
19	181839068885	0.0	13.0	13.0
20	181839070265	0.0	13.0	13.0
21	171739083583	0.0	0.0	0.0
22	181839068248	0.0	15.25	15.25
23	181839063176	0.0	13.0	13.0
24	171739070669	0.0	0.0	0.0
25	171739072665	0.0	13.75	13.75
26	211339048730	0.0	14.25	14.25
27	161539077498	0.0	0.0	0.0
28	20129047253	0.0	0.0	0.0
29	181439062220	0.0	13.75	13.75

**Filière:** Génie Mécanique  
énergétique

**Niveau:**

**Matière:** TP Méthodes Numériques / Section A / 1

**PV de délibération par matière**

#	Matricule	Examen	CC	MG
1	181839067885	0.0	12.5	12.5
2	181839065624	0.0	12.5	12.5
3	171739072184	0.0	13.5	13.5
4	181439064830	0.0	10.0	10.0
5	171739070052	0.0	13.5	13.5
6	161639066427	0.0	14.0	14.0
7	20089039656	0.0	11.0	11.0
8	181839069304	0.0	13.5	13.5
9	181839063716	0.0	15.0	15.0
10	171739073371	0.0	15.25	15.25
11	171739068436	0.0	14.0	14.0
12	171739070608	0.0	13.5	13.5
13	161739063182	0.0	0.0	0.0
14	21059063853	0.0	13.5	13.5
15	181839066474	0.0	19.0	19.0
16	181839071917	0.0	0.0	0.0
17	181839067146	0.0	16.0	16.0
18	181839068250	0.0	11.0	11.0
19	181839068915	0.0	14.0	14.0
20	171739072699	0.0	13.0	13.0
21	171739070711	0.0	12.0	12.0
22	181839067457	0.0	0.0	0.0
23	2198825745	0.0	13.5	13.5
24	171739069690	0.0	13.0	13.0
25	181839067975	0.0	13.0	13.0
26	171739069723	0.0	14.0	14.0
27	20129050014	0.0	14.0	14.0
28	211339051419	0.0	10.5	10.5

**Filière:** Génie Mécanique  
énergétique

**Niveau:**

**Matière:** TP Méthodes Numériques / Section A / 2

**PV de délibération par matière**

#	Matricule	Examen	CC	MG
1	181839065187	0.0	0.0	0.0
2	171739069698	0.0	0.0	0.0
3	171739069797	0.0	0.0	0.0
4	181839072961	0.0	0.0	0.0
5	171739065450	0.0	0.0	0.0
6	181839066207	0.0	10.0	10.0
7	181839067589	0.0	16.5	16.5
8	21079066478	0.0	14.5	14.5
9	171739072743	0.0	0.0	0.0
10	181839067147	0.0	16.0	16.0
11	181839068988	0.0	0.0	0.0
12	171739070759	0.0	0.0	0.0
13	171739074322	0.0	14.0	14.0
14	181839063041	0.0	12.5	12.5
15	12124018289	0.0	14.5	14.5
16	2199931444	0.0	16.5	16.5
17	171739068563	0.0	0.0	0.0
18	171739070619	0.0	0.0	0.0
19	161639071231	0.0	0.0	0.0
20	181839069884	0.0	10.0	10.0
21	181839066530	0.0	12.0	12.0
22	181839067906	0.0	14.0	14.0
23	181839067980	0.0	13.5	13.5
24	171739072369	0.0	0.0	0.0
25	171739070124	0.0	13.0	13.0
26	191539062827	0.0	0.0	0.0
27	211339061634	0.0	0.0	0.0
28	21129058326	0.0	10.0	10.0

**Filière:** Génie Mécanique  
énergétique

**Niveau:**

**Matière:** TP Méthodes Numériques / Section A / 3

**PV de délibération par matière**

#	Matricule	Examen	CC	MG
1	171739069710	0.0	12.0	12.0
2	171739069803	0.0	12.5	12.5
3	171739070152	0.0	13.5	13.5
4	181839067884	0.0	13.5	13.5
5	181839069043	0.0	12.0	12.0
6	171739068731	0.0	13.5	13.5
7	171739070764	0.0	15.0	15.0
8	21079069412	0.0	12.5	12.5
9	171739073189	0.0	0.0	0.0
10	171739075991	0.0	13.5	13.5
11	171739067239	0.0	0.0	0.0
12	181839067455	0.0	0.0	0.0
13	181839066628	0.0	0.0	0.0
14	161639078030	0.0	15.5	15.5
15	181839067970	0.0	0.0	0.0
16	181839065240	0.0	14.0	14.0
17	181839079945	0.0	15.0	15.0
18	181839066384	0.0	0.0	0.0
19	181839068885	0.0	12.5	12.5
20	181839070265	0.0	13.0	13.0
21	171739083583	0.0	0.0	0.0
22	181839068248	0.0	14.0	14.0
23	181839063176	0.0	15.5	15.5
24	171739070669	0.0	15.0	15.0
25	171739072665	0.0	10.5	10.5
26	211339048730	0.0	14.0	14.0
27	161539077498	0.0	13.25	13.25
28	20129047253	0.0	14.0	14.0
29	181439062220	0.0	13.5	13.5

**Filière:** Génie Mécanique  
énergétique

**Niveau:**

**Matière:** Transfert de chaleur et de Masse Approfondi / Section A / 1

**PV de délibération par matière**

#	Matricule	Examen	CC	MG
1	181839067885	1.5	11.8	5.62
2	181839065624	2.0	2.16	2.06
3	171739072184	2.0	10.84	5.54
4	181439064830	3.5	1.39	2.66
5	171739070052	0.5	11.15	4.76
6	161639066427	0.0	0.0	0.0
7	20089039656	9.0	13.77	10.91
8	181839069304	1.5	10.53	5.11
9	181839063716	5.0	4.88	4.95
10	171739073371	0.0	0.0	0.0
11	171739068436	7.0	14.08	9.83
12	171739070608	0.0	0.0	0.0
13	161739063182	0.0	0.0	0.0
14	21059063853	6.5	13.77	9.41
15	181839066474	3.0	13.19	7.08
16	181839071917	0.0	0.0	0.0
17	181839067146	1.5	9.72	4.79
18	181839068250	4.0	11.18	6.87
19	181839068915	6.0	5.76	5.9
20	171739072699	6.0	10.49	7.8
21	171739070711	0.0	0.0	0.0
22	181839067457	0.0	0.0	0.0
23	2198825745	4.0	11.65	7.06
24	171739069690	4.5	0.0	2.7
25	181839067975	2.0	11.37	5.75
26	171739069723	0.0	0.0	0.0
27	20129050014	0.0	0.0	0.0
28	211339051419	1.5	7.43	3.87



**Filière:** Génie Mécanique  
énergétique

**Niveau:**

**Matière:** Transfert de chaleur et de Masse Approfondi / Section A / 2

**PV de délibération par matière**

#	Matricule	Examen	CC	MG
1	181839065187	0.0	0.0	0.0
2	171739069698	4.5	0.0	2.7
3	171739069797	1.0	0.0	0.6
4	181839072961	0.0	0.0	0.0
5	171739065450	0.0	0.0	0.0
6	181839066207	6.0	13.0	8.8
7	181839067589	5.0	12.23	7.89
8	21079066478	5.0	12.73	8.09
9	171739072743	10.0	11.92	10.77
10	181839067147	2.5	3.8	3.02
11	181839068988	0.0	2.1	0.84
12	171739070759	3.0	10.8	6.12
13	171739074322	5.0	11.3	7.52
14	181839063041	3.5	5.11	4.14
15	12124018289	7.0	11.85	8.94
16	2199931444	3.5	13.19	7.38
17	171739068563	5.0	14.08	8.63
18	171739070619	0.0	0.0	0.0
19	161639071231	0.0	0.0	0.0
20	181839069884	9.0	13.0	10.6
21	181839066530	4.0	7.24	5.3
22	181839067906	3.5	10.1	6.14
23	181839067980	3.5	10.1	6.14
24	171739072369	7.0	10.15	8.26
25	171739070124	3.0	10.37	5.95
26	191539062827	0.0	0.0	0.0
27	211339061634	0.0	0.0	0.0
28	21129058326	3.0	8.6	5.24

**Filière:** Génie Mécanique  
énergétique

**Niveau:**

**Matière:** Transfert de chaleur et de Masse Approfondi / Section A / 3

**PV de délibération par matière**

#	Matricule	Examen	CC	MG
1	171739069710	4.0	0.0	2.4
2	171739069803	4.0	0.0	2.4
3	171739070152	5.0	10.46	7.18
4	181839067884	4.5	11.72	7.39
5	181839069043	6.5	13.93	9.47
6	171739068731	7.5	13.93	10.07
7	171739070764	4.5	11.76	7.4
8	21079069412	5.0	12.11	7.84
9	171739073189	0.0	0.0	0.0
10	171739075991	0.0	6.5	2.6
11	171739067239	0.0	0.0	0.0
12	181839067455	0.0	3.72	1.49
13	181839066628	0.0	0.0	0.0
14	161639078030	3.0	11.15	6.26
15	181839067970	0.0	0.0	0.0
16	181839065240	3.0	11.03	6.21
17	181839079945	7.0	10.68	8.47
18	181839066384	0.0	0.0	0.0
19	181839068885	5.0	10.72	7.29
20	181839070265	3.5	2.87	3.25
21	171739083583	0.0	0.0	0.0
22	181839068248	4.0	10.95	6.78
23	181839063176	4.0	10.65	6.66
24	171739070669	0.0	0.0	0.0
25	171739072665	6.0	11.42	8.17
26	211339048730	4.5	11.26	7.2
27	161539077498	4.0	0.0	2.4
28	20129047253	0.0	0.0	0.0
29	181439062220	4.5	6.62	5.35