# PROCEDURE FOR COMPILATION OF EXAMINATION SCORES FOR MULTI SESSION/SLOT PAPERS

(Normalization procedure based on PERCENTILE SCORE)

#### INTRODUCTION:

When an examination has multiple question papers (in the same subject matter), it is critical that they be developed to be parallel to one another on the given syllabus. Two or more question papers of an exam are considered parallel when they have been developed to be as similar to one another as possible in terms of the test specifications and statistical criteria. High-stakes examination may have multiple question papers in use at every test administration, when the examination cannot be conducted in a single batch. However, using multiple question papers means that the multiple question papers developed should be similar to each other.

The National Testing Agency-NTA (Govt. Of India), which conducts examinations in multiple slots for various exams like JEE, NEET etc has recommended a procedure called Normalization using the Percentile Method, to overcome this issue and to see that candidates are not disadvantaged.

### **Excerpts from NTA guidelines:**

The candidates will be given different sets of questions per session and it is quite possible that in spite of all efforts of maintaining equivalence among various question papers, the difficulty level of these question papers administered in different sessions may not be exactly the same. Some of the candidates may end up attempting a relatively tougher set of questions when compared to other sets. The candidates who attempt the comparatively tougher examination are likely to get lower marks as compared to those who attempt the easier one. In order to overcome such a situation, "Normalization procedure based on Percentile Score" will be used for ensuring that candidates are neither benefitted nor disadvantaged due to the difficulty level of the examination. With the objective of ensuring that a candidate's true merit is identified, and that a level playing field is created in the above context, the Normalization Procedure, set out below shall be adopted, for compiling the NTA scores for multi session papers.

The process of Normalization is an established practice for comparing candidate scores across multi session papers and is similar to those being adopted in other large educational selection tests conducted in India.

#### **Percentile Scores:**

Percentile scores are scores based on the relative performance of all those who appear for the examination. Basically the marks obtained are transformed into a scale ranging from 100 to 0 for each session of examinees. The Percentile Score indicates the percentage of candidates that have scored EQUAL TO OR BELOW (same or lower raw scores) in that particular Percentile in that examination. Therefore the topper (highest score) of each session will get the same Percentile of 100 which is desirable. The marks obtained in between the highest and lowest scores are also converted to appropriate Percentiles.

The Percentile score of a Candidate is calculated as follows:

100 X Number of candidates appeared in the 'Session' with raw score EQUAL TO OR LESS than the candidate / Total number of the candidates appeared in the 'Session'

Note: Percentile score is not the same as percentage of marks obtained.

The Percentile score will be the Normalized Score for the particular examination (instead of the raw marks of the candidate) and this percentile score shall be used for preparation of the merit lists.

IMPORTANT: Candidate's scores will be notified/published in Percentile scores only and NOT as raw scores or percentage scores.

N.B: For detail procedure see NTA guidelines attached.

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# **National Testing Agency(NTA)**

# Procedure to be adopted for compilation of NTA scores for multi session Papers (Normalization procedure based on PERCENTILESCORE)

NTA will be conducting examinations on multiple dates, generally in two sessions per day. The candidates will be given different sets of questions per session and it is quite possible that in spite of all efforts of maintainingequivalence among various question papers, the difficulty level of these question papers administered in different sessions may not be exactly the same. Some of the candidates may end up attempting a relatively tougher set of questions when compared to other sets. The candidates who attempt the comparatively tougher examination are likely to get lower marks as compared to those who attempt the easier one. In order to overcome such a situation, "Normalization procedure based on Percentile Score" will be used for ensuring that candidates are neither benefitted nor disadvantaged due to the difficulty level of the examination. With the objective of ensuring that a candidate's true merit is identified, and that a level playing field is created in the above context, the Normalization Procedure, set out below shall be adopted, for compiling the NTA scores for multi session papers.

The process of Normalization is an established practice for comparing candidate scores across multi session papers and is similar to those being adopted in other large educational selection tests conducted in India. Fornormalization across sections, NTA shall use the percentile equivalence.

**Percentile Scores:** Percentile scores are scores based on the relative performance of all those who appear for the examination. Basically the marks obtained are transformed into a scale ranging from 100 to 0 for each session of examinees.

The Percentile Score indicates the percentage of candidates that have scored EQUAL TO OR BELOW (same or lower raw scores) that particular Percentile in that examination. Therefore the topper(highest score) of each session will get the same Percentile of 100 which is desirable. The marks obtained in between the highest and lowest scores are also converted to appropriate Percentiles.

The Percentile score will be the Normalized Score for the examination (instead of the raw marks of the candidate) and shall be used for preparation of the merit lists.

The Percentile Scores will be calculated up to 7 decimal places to avoid bunching effect and reduce ties.

The Percentile score of a Candidate is calculated as follows:

100 X Number of candidates appeared in the 'Session' with raw score EQUAL TO OR LESS than the candidate Total number of the candidates appeared in the 'Session'

**Note:** The Percentile of the Total shall **NOT** be an aggregate or average of the Percentile of individual subject. Percentile score is not the same as percentage of marks obtained.

Example: Suppose a test was held in 4 sessions of examinees as per details given below:
(Allocation of Days and shifts were done randomly)

#### (a) Distribution of candidates were as follows:

Session-1: Day-1 Shift-1, Session-2: Day-1 Shift-2, Session-3: Day-2 Shift-1 and Session-4: Day-2 Shift-2

Session	Day/Shift	No of Car	ndidates		Marks		
		Absent	Appeared	Total	Highest	Lowest	
Session-1	Day-1 Shift-1	3974	28012	31986	335	-39	
Session-2	Day-1 Shift-2	6189	32541	38730	346	-38	
Session-3	Day-2 Shift-1	6036	41326	47362	331	-49	
Session-4 Day-2 Shift-2		9074	40603	49677	332	-44	
Total(Sessio	n-1 to Session-4)	25273	142482	167755	346	-49	

In this method of scoring the HIGHEST RAW SCORE in each paper (irrespective of the raw scores) will be the 100 Percentile indicating that 100% of candidates have scores equal to or lesserthan the highest scorer/ topper for that session

**Highest Raw Score and Percentile Score:** All the highest raw scores will have normalized Percentile Scoreof 100for their respective session.

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Session	Total Candidates Appeared	Highest Raw Score	Candidates who scored EQUAL OR LESS THAN Highest Raw Score	Percentile Score	Remarks
Session-1	28012	335	28012	100.0000000 [(28012/28012)*100]	i.e.all the highest raw scores
Session-2	32541	346	32541	100.0000000 [(32541/32541)*100]	would be normalized to 100
Session-3	41326	331	41326	100.0000000 [(41326/41326)*100]	Percentile Score for their
Session-4	40603	332	40603	100.0000000 [(40603/40603)*100]	respective session.

**Lowest Raw Score and Percentile Score:** Percentile Score of all the lowest raw scores will depend on the total number of candidates who have taken the examination for their respective session.

Session	Total Candidates Appeared	Lowest Raw Score	Candidates who scored EQUAL OR LESS THAN Lowest Raw Score	Percentile Score	Remarks
Session-1	28012	-39	1	0.0035699 [(1/28012)*100]	i.e. Percentile Score of all the
Session-2	32541	-38	1	0.0030730 [(1/32541)*100]	lowest raw scores are different i.e. Percentile Scoredepend on
Session-3	41326	-49	1	0.0024198 [(1/41326)*100]	the total number of candidates who have taken the examination
Session-4	40603	-44	1	0.0024629 [(1/40603)*100]	for their respective session.

The following is a further explanation of the interpretation of the raw scores and Percentile Score in Session-3 (Day-2 and Shift-1) with 41326 candidates who have taken the examination.

Candidate	Percentile Score	No of	Raw	Remark
Candidate	1 el centile Scole	Candidates	Score	ACHIAI A
A	100.0000000	1	331	Indicates that amongst those appeared, 100% have scored either
12	[(41326/41326)*100]	_	001	EQUAL TO OR LESS THAN the candidate A ( <b>331 raw score</b> ).
				It also indicates that no candidate has scored more than the
				candidate A (331 raw score).
В	90.1224411	77	121	Indicates that amongst those appeared, 90.1224411% have scored
	[(37244/41326)*100]			either EQUAL TO OR LESS THAN the candidate B (121 raw
				score).
				It also indicates that remaining candidates have scored more than
				candidate B (121 raw score).
C	50.4549194	381	41	Indicates that amongst those appeared, 50.4549194% have scored
	[(20851/41326)*100]			either EQUAL TO OR LESS THAN the candidate C(41 raw
				score).
				It also indicates that remaining those appeared have scored more
	24 = 240420	=00		than candidate C (41 raw score).
D	31.7040120	789	25	Indicates that amongst those appeared, 31.7040120% have scored
	[(13102/41326)*100]			either EQUAL TO OR LESS THAN the candidate D(25 raw
				score)
				It also indicates that remaining candidates have scored more than
- F	1 1024217	100	1.5	candidate D (25 raw score).
E	1.1034216	100	-15	Indicates that amongst those appeared, 1.1034216% have scored
	[(456/41326)*100]			either EQUAL TO OR LESS THAN the candidate E(-15 raw score)
				It also indicates that remaining candidates have scored more than candidate E (-15 raw score)
				Candidate E (-15 Taw Score)

#### **METHOD OF RESOLVING TIES:**

The overall merit / ranking shall be based on the **Percentile scores of the Total Raw Scores.**In case of two or more candidates obtaining**equal Percentile Scores** in the Test, the inter-se merit of such candidates shall be determined in **order of preference** as follows:

- (a) Candidates obtaining higher Percentile Score in Mathematics in the Test.
- (b) Candidates obtaining higher Percentile Score in Physics in the Test.
- (c) Candidates obtaining higher Percentile Score in Chemistry in the Test.
- (d) Candidates older in age to be preferred.

#### STEP-BY-STEP PROCEDURE FOR NORMALIZATION AND PREPARATION OF MERIT / RANKLIST:

## Step-1: Distribution of Examinees in two days and in two shifts per day

Candidates would be distributed into four sessions randomly so that each sessionhasapproximately equal number of candidates. These four sessions would be as follows:

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**Session-1:** Day-1 Shift-1, **Session-2:** Day-1 Shift-2, **Session-3:** Day-2 Shift-1 and **Session-4:** Day-2 Shift-2

In the event of more number of days or more number of shifts, the candidates will be divided accordingly.

This will ensure that there is no bias in the distribution of candidates who shall take the examination. Further, with a large population of examinees spread over the entire country the possibility of such bias becomes remote.

#### **Step-2: Preparation of Results for each Session:**

The examination results for each session would be prepared in the form of

- Raw Scores
- ➤ Percentiles Scoresseparately for each of the three subjects (Mathematics, Physics, Chemistry) and the Total.

The following 4 Percentiles would be calculated for each candidate in the Session:

Let T1,M1, P1, C1be the raw scoresin Total, Mathematics, Physics, Chemistryof a candidate and T1P, M1P, P1P, C1Pbe the Percentile Scores of Total, Mathematics, Physics, Chemistry of that candidate.

Total Percentile (T1P): 100 X	No. of candidates appeared from the session with raw score EQUAL TO OR LESS than T1 score
	Total No. of candidates appeared in the session
	No. of candidates appeared from the session with raw score
Mathematics Percentile (M1P): 100 X	<b>EQUAL TO OR LESS than M1 score in Mathematics</b>
	Total No. of candidates appeared in the session
	No. of candidates appeared from the sessionwith raw score
Physics Percentile (P1P): 100 X	EQUAL TO OR LESS than P1score in Physics
, , ,	Total No. of candidates appeared in the session
	No. of candidates appeared from the sessionwith raw score
Chemistry Percentile (C1P): 10	0 X EQUAL TO OR LESS than C1score in Chemistry
- · · · · · · · · · · · · · · · · · · ·	Total No. of candidates appeared in the session

#### Step-3: Compilation of NTA score and Preparation of Overall Merit/Rank List:

The Percentile scores for the Total Raw Score for all the four sessions (**Session-1**: Day-1 Shift-1, **Session-2**: Day-1 Shift-2, **Session-3**: Day-2 Shift-1 and **Session-4**: Day-2 Shift-2) as calculated in Step-2 above would be merged and shall be called the NTA scores which will then be used for compilation of result and preparation of overall Merit List / Ranking.

The Percentile of all four sessions will be calculated separately for the Total raw score and the raw scores in three subjects (Mathematics, Physics, and Chemistry) as follows:

	RAW S	CORE			PERCENTILE SCORE								
TOTAL	MATH	PHY	CHE	TOTAL	MATH	PHY	CHE	OF BIRTH					
335	115	115	105	100.0000000	99.9964301	99.9750107	99.9571612	22011995					
332	111	115	106	99.9964301	99.9500214	99.9750107	99.9750107	23081994					
330	115	110	105	99.9928602	99.9964301	99.8714836	99.9571612	03091994					
330	110	120	100	99.9928602	99.9143224	100.0000000	99.8679138	10011994					
330	110	110	110	99.9928602	99.9143224	99.8714836	99.9964301	17071994					
314	101	102	111	99.9286020	99.3788376	99.4859346	100.0000000	13041995					
310	110	110	90	99.9071826	99.9143224	99.8714836	99.4181065	22031994					
310	110	110	90	99.9071826	99.9143224	99.8714836	99.4181065	23021996					
295	120	90	85	99.6608596	100.0000000	98.2400400	98.9147508	01111994					
50	25	15	10	49.7144081	63.5834642	43.5277738	38.7119806	30111994					
50	25	15	10	49.7144081	63.5834642	43.5277738	38.7119806	30111994					
50	25	5	20	49.7144081	63.5834642	20.6197344	61.1595031	16031995					
50	25	5	20	49.7144081	63.5834642	20.6197344	61.1595031	16031995					
<b>\</b>	<b>+</b>	<b>+</b>	<b>\</b>	<b>+</b>	<b>+</b>	<b>\</b>	\ \	↓					
				·									
	335 332 330 330 330 314 310 310 295 50 50	TOTAL         MATH           335         115           332         111           330         115           330         110           331         110           314         101           310         110           310         110           295         120           50         25           50         25           50         25           50         25           50         25	RAW SCORE           TOTAL         MATH         PHY           335         115         115           332         111         115           330         115         110           330         110         120           330         110         110           314         101         102           310         110         110           310         110         110           295         120         90           50         25         15           50         25         15           50         25         5	RAW SCORE           TOTAL         MATH         PHY         CHE           335         115         115         105           332         111         115         106           330         115         110         105           330         110         120         100           330         110         110         110           314         101         102         111           310         110         110         90           310         110         110         90           295         120         90         85           50         25         15         10           50         25         15         10           50         25         5         20	RAW SCORE           TOTAL         MATH         PHY         CHE         TOTAL           335         115         115         105         100.0000000           332         111         115         106         99.9964301           330         115         110         105         99.9928602           330         110         120         100         99.9928602           314         101         102         111         99.9286020           310         110         110         90         99.9071826           310         110         110         90         99.9071826           295         120         90         85         99.6608596           50         25         15         10         49.7144081           50         25         15         10         49.7144081           50         25         5         20         49.7144081	RAW SCORE         PERCENTI           TOTAL         MATH         PHY         CHE         TOTAL         MATH           335         115         115         105         100.000000         99.9964301           332         111         115         106         99.9964301         99.9500214           330         115         110         105         99.9928602         99.99964301           330         110         120         100         99.9928602         99.9143224           330         110         110         110         99.9928602         99.9143224           314         101         102         111         99.9286020         99.3788376           310         110         110         90         99.9071826         99.9143224           310         110         110         90         99.9071826         99.9143224           295         120         90         85         99.6608596         100.0000000           50         25         15         10         49.7144081         63.5834642           50         25         5         20         49.7144081         63.5834642	TOTAL         MATH         PHY         CHE         TOTAL         MATH         PHY           335         115         115         105         100.0000000         99.9964301         99.9750107           332         111         115         106         99.9964301         99.9500214         99.9750107           330         115         110         105         99.9928602         99.9964301         99.8714836           330         110         120         100         99.9928602         99.9143224         100.0000000           330         110         110         110         99.9928602         99.9143224         99.8714836           314         101         102         111         99.9286020         99.3788376         99.4859346           310         110         110         90         99.9071826         99.9143224         99.8714836           310         110         110         90         99.9071826         99.9143224         99.8714836           295         120         90         85         99.6608596         100.0000000         98.2400400           50         25         15         10         49.7144081         63.5834642         43.5277738 <tr< td=""><td>RAW SCORE         PERCENTILE SCORE           TOTAL         MATH         PHY         CHE         TOTAL         MATH         PHY         CHE           335         115         115         105         100.0000000         99.9964301         99.9750107         99.9571612           332         111         115         106         99.9964301         99.9500214         99.9750107         99.9750107           330         115         110         105         99.9928602         99.9964301         99.8714836         99.9571612           330         110         120         100         99.9928602         99.9143224         100.0000000         99.8679138           330         110         110         110         99.9928602         99.9143224         99.8714836         99.9964301           314         101         102         111         99.9286020         99.3788376         99.4859346         100.0000000           310         110         110         90         99.9071826         99.9143224         99.8714836         99.4181065           310         120         90         85         99.6608596         100.0000000         98.2400400         98.9147508           50</td></tr<>	RAW SCORE         PERCENTILE SCORE           TOTAL         MATH         PHY         CHE         TOTAL         MATH         PHY         CHE           335         115         115         105         100.0000000         99.9964301         99.9750107         99.9571612           332         111         115         106         99.9964301         99.9500214         99.9750107         99.9750107           330         115         110         105         99.9928602         99.9964301         99.8714836         99.9571612           330         110         120         100         99.9928602         99.9143224         100.0000000         99.8679138           330         110         110         110         99.9928602         99.9143224         99.8714836         99.9964301           314         101         102         111         99.9286020         99.3788376         99.4859346         100.0000000           310         110         110         90         99.9071826         99.9143224         99.8714836         99.4181065           310         120         90         85         99.6608596         100.0000000         98.2400400         98.9147508           50					

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A20180792	-39	-5	-10	-24	0.0035699	3.8876196	1.7599600	0.0249893	12051995
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			P	ERCEN'	TILE : SESS	ION-2 i.e. DA	<b>Y-1 SHIFT-2</b>			
ROLL NO		1	AW SCORE PERCENTILE SCORE							
	TOTAL	MATH	PHY	CHE	TOTAL	MATH	PHY	СНЕ	OF BIRTH	
B20123935	346	115	116	115	100.0000000	99.9692695	99.9938539	99.9938539	21081994	
B20012622	345	115	110	120	99.9969270	99.9692695	99.9600504	100.0000000	24061994	
B20621750	336	115	110	111	99.9938539	99.9692695	99.9600504	99.9815617	06111994	
B20298730	331	115	110	106	99.9907809	99.9692695	99.9600504	99.9416121	11121993	
B20197060	328	120	106	102	99.9846348	100.0000000	99.9047356	99.8248364	24111993	
B20035799	328	115	97	116	99.9846348	99.9692695	99.5697735	99.9969270	02121994	
B20175737	321	115	106	100	99.9692695	99.9692695	99.9047356	99.7203528	28101994	
B20272584	321	115	105	101	99.9692695	99.9692695	99.8463477	99.7941059	26081994	
B20030697	320	115	105	100	99.9539043	99.9692695	99.8463477	99.7203528	04031994	
B20656224	320	115	105	100	99.9539043	99.9692695	99.8463477	99.7203528	11071994	
B20410215	320	115	105	100	99.9539043	99.9692695	99.8463477	99.7203528	10061995	
B20236444	312	120	103	89	99.8770781	100.0000000	99.7695215	98.7892198	16031994	
B20128586	311	120	91	100	99.8740051	100.0000000	99.2102271	99.7203528	06021995	
B20001667	305	120	91	94	99.8033250	100.0000000	99.2102271	99.2225193	04011995	
B20042147	304	120	87	97	99.7848868	100.0000000	98.8445346	99.5544083	27091994	
B20051256	301	106	120	75	99.7480102	99.5667005	100.0000000	96.2754679	11011995	
B20481968	299	120	90	89	99.7111336	100.0000000	99.1088166	98.7892198	02091994	
B20091701	299	90	120	89	99.7111336	97.6491196	100.0000000	98.7892198	19081994	
B20549576	294	120	78	96	99.6281614	100.0000000	97.8365754	99.4407056	30101993	
B20098269	288	120	83	85	99.5113856	100.0000000	98.4235272	98.2452906	21081994	
B20914176	258	120	59	79	98.5648874	100.0000000	94.5945115	97.2066009	30121994	
B20071356	71	29	17	25	62.1124120	55.9110046	61.5899942	62.0202206	21041994	
B21253378	71	29	17	25	62.1124120	55.9110046	61.5899942	62.0202206	21041994	
B21180340	52	25	15	12	46.4521680	49.4207308	57.7425402	33.7359024	23121994	
B20472057	52	25	15	12	46.4521680	49.4207308	57.7425402	33.7359024	23121994	
					•					
+	+	+	+	+	+	<b>+</b>	<b>+</b>	<b>+</b>	+	
B20236060	-38	0	-25	-13	0.0030730	4.6679573	0.0245844	0.4148613	08081995	

			<b>P</b> !	ERCEN'	PERCENTILE : SESSION-3 i.e. DAY-2 SHIFT-1													
ROLL NO		RAW S					ILE SCORE		DATE									
	TOTAL	MATH	PHY	СНЕ	TOTAL	MATH	PHY	СНЕ	OF BIRTH									
C20150694	331	120	110	101	100.0000000	100.0000000	100.0000000	99.9201471	07041995									
C20087997	321	115	95	111	99.9975802	99.9903209	99.9080482	99.9975802	04101993									
C20121991	321	106	110	105	99.9975802	99.9007888	100.0000000	99.9661230	22051995									
C20058572	316	111	90	115	99.9927406	99.9661230	99.7870590	100.0000000	22061995									
C20076289	316	105	100	111	99.9927406	99.8765910	99.9685428	99.9975802	11121994									
C20060310	315	110	95	110	99.9879011	99.9491845	99.9080482	99.9927406	05111994									
C20008597	315	110	95	110	99.9879011	99.9491845	99.9080482	99.9927406	29121994									
C20241896	315	110	95	110	99.9879011	99.9491845	99.9080482	99.9927406	11011995									
C20388248	307	94	110	103	99.9709626	99.4991047	100.0000000	99.9419252	23111993									
C20672438	303	99	110	94	99.9588637	99.7047863	100.0000000	99.7096259	21081994									
C20430859	284	102	90	92	99.8741712	99.8112568	99.7870590	99.6346126	11101994									
C20518247	284	102	76	106	99.8741712	99.8112568	99.0611237	99.9733824	05081994									
C20045510	282	96	88	98	99.8620723	99.6249335	99.7338237	99.8572327	31071994									
C20361875	171	54	57	60	96.2832115	93.3480134	96.5203504	95.0878382	14081994									
C20860609	171	54	57	60	96.2832115	93.3480134	96.5203504	95.0878382	14081994									
C20861476	60	35	20	5	67.0014035	81.8056429	73.0460243	27.9122102	17081994									
C20512680	60	35	20	5	67.0014035	81.8056429	73.0460243	27.9122102	17081994									
C20069270	60	28	8	24	67.0014035	72.7653293	44.3256062	68.2766297	10101994									
C20355550	60	28	8	24	67.0014035	72.7653293	44.3256062	68.2766297	10101994									
+	↓		<b>—</b>		<b>│</b>	<b>→</b>	<b> </b>	<b>↓</b>										
C21082034	-49	-13	-17	-19	0.0024198	0.5323525	0.3750665	0.1742245	19091994									

	PERCENTILE : SESSION-4 i.e. DAY-2 SHIFT-1													
ROLL NO		RAW S					ILE SCORE		DATE					
	TOTAL	MATH	PHY	СНЕ	TOTAL	MATH	PHY	СНЕ	OF BIRTH					
D20479616	332	120	101	111	100.0000000	100.0000000	99.9778342	99.9926114	25081994					
D20040337	330	120	110	100	99.9975371	100.0000000	100.0000000	99.8916336	23091994					
D20568599	320	120	100	100	99.9950743	100.0000000	99.9704455	99.8916336	19061995					
D20007708	320	105	110	105	99.9950743	99.9285767	100.0000000	99.9630569	04111993					
D20563271	311	110	90	111	99.9901485	99.9827599	99.8867079	99.9926114	31031995					
D20265618	311	105	106	100	99.9901485	99.9285767	99.9926114	99.8916336	01091997					
D20074767	310	103	102	105	99.9852228	99.9088737	99.9827599	99.9630569	14091993					
D20840372	308	106	101	101	99.9827599	99.9556683	99.9778342	99.9162623	15061995					
D20563852	304	103	96	105	99.9704455	99.9088737	99.9532054	99.9630569	04061995					
D20467385	303	103	110	90	99.9679827	99.9088737	100.0000000	99.5024998	20071994					
D20398094	302	106	96	100	99.9630569	99.9556683	99.9532054	99.8916336	22081995					
D20428934	299	77	106	116	99.9605940	98.9237248	99.9926114	100.0000000	14101993					
D20032939	287	106	95	86	99.9310396	99.9556683	99.9433539	99.2611383	28041994					
D20690279	287	106	91	90	99.9310396	99.9556683	99.9064109	99.5024998	19071995					
D20840699	260	95	80	85	99.7758786	99.8029702	99.6281063	99.1798636	02021995					
D20084751	260	95	80	85	99.7758786	99.8029702	99.6281063	99.1798636	22021995					
D21237483	55	20	15	20	57.4859001	64.2415585	46.8167377	56.5573972	11041995					
D21077463	55	20	15	20	57.4859001	64.2415585	46.8167377	56.5573972	11041995					
D20348188	55	5	35	15	57.4859001	29.7441076	85.5404773	44.9326404	01061994					
D20777569	55	5	35	15	57.4859001	29.7441076	85.5404773	44.9326404	01061994					
<b>+</b>	+	+	. ↓	<b>+</b>	<b>+</b>	<b>+</b>	<b>+</b>	<b>+</b>	<b>+</b>					
D21277410	-44	-13	-13	-18	0.0024629	1.3890599	0.5295175	0.0837377	17071995					

Merge the Percentile Scores calculated above of all four sessions for the **Total Percentile**, **Mathematics Percentile**, **Physics Percentile and Chemistry Percentile** for preparation of NTA scores and overall Merit/Ranking.

There are some candidates with equal **Total Percentile scores** (i.e. tie). To resolve tie, the candidates have been arranged in following order:

- Higher Percentile score in Mathematics
- Higher Percentile score in Physics
- **→** Higher Percentile score in Chemistry
- Candidates older in age.

The above sequence would be adopted till the tie is resolved. The Final Ranking/ Merit would be prepared after resolving ties.

		P	ERCEN	TILE:	ALL FOUR	SESSIONS CO	OMBINED		
ROLL NO		RAW SC				PERCENTI			DATE
C20150694	<b>TOTAL</b> 331	120	<b>PHY</b> 110	101	TOTAL 100.0000000	MATH 100.0000000	PHY 100.0000000	<b>CHE</b> 99.9201471	<b>OF BIRTH</b> 07041995
D20479616	332	120	101	111	100.0000000	100.0000000	99.9778342	99.9926114	25081994
A20020720	335	115	115	105	100.0000000	99.9964301	99.9750107	99.9571612	22011995
B20123935	346	115	116	115	100.0000000	99.9692695	99.9938539	99.9938539	21081994
C20087997	321	115	95	111	99.9975802	99.9903209	99.9080482	99.9975802	04101993
C20121991	321	106	110	105	99.9975802	99.9007888	100.0000000	99.9661230	22051995
D20040337	330	120	110	100	99.9975371	100.0000000	100.0000000	99.8916336	23091994
B20012622	345	115	110	120	99.9969270	99.9692695	99.9600504	100.0000000	24061994
A20411664	332	111	115	106	99.9964301	99.9500214	99.9750107	99.9750107	23081994
D20568599	320	120	100	100	99.9950743	100.0000000	99.9704455	99.8916336	19061995
D20007708	320	105	110	105	99.9950743	99.9285767	100.0000000	99.9630569	04111993
B20621750	336	115	110	111	99.9938539	99.9692695	99.9600504	99.9815617	06111994
A20018569	330	115	110	105	99.9928602	99.9964301	99.8714836	99.9571612	03091994
A20339879	330	110	120	100	99.9928602	99.9143224	100.0000000	99.8679138	10011994
A20027230	330	110	110	110	99.9928602	99.9143224	99.8714836	99.9964301	17071994
C20058572	316	111	90	115	99.9927406	99.9661230	99.7870590	100.0000000	22061995
C20076289	316	105	100	111	99.9927406	99.8765910	99.9685428	99.9975802	11121994
B20298730	331	115	110	106	99.9907809	99.9692695	99.9600504	99.9416121	11121993
D20563271	311	110	90	111	99.9901485	99.9827599	99.8867079	99.9926114	31031995
D20265618	311	105	106	100	99.9901485	99.9285767	99.9926114	99.8916336	01091997
C20060310	315	110	95	110	99.9879011	99.9491845	99.9080482	99.9927406	05111994
C20008597	315	110	95	110	99.9879011	99.9491845	99.9080482	99.9927406	29121994
C20241896	315	110	95	110	99.9879011	99.9491845	99.9080482	99.9927406	11011995
D20074767	310	103	102	105	99.9852228	99.9088737	99.9827599	99.9630569	14091993
B20197060	328	120	106	102	99.9846348	100.0000000	99.9047356	99.8248364	24111993
B20035799	328	115	97	116	99.9846348	99.9692695	99.5697735	99.9969270	02121994
D20840372	308	106	101	101	99.9827599	99.9556683	99.9778342	99.9162623	15061995
C20388248	307	94	110	103	99.9709626	99.4991047	100.0000000	99.9419252	23111993
D20563852	304	103	96	105	99.9704455	99.9088737	99.9532054	99.9630569	04061995
B20175737	321	115	106	100	99.9692695	99.9692695	99.9047356	99.7203528	28101994
B20272584	321	115	105	101	99.9692695	99.9692695	99.8463477	99.7941059	26081994
D20467385	303	103	110	90	99.9679827	99.9088737	100.0000000	99.5024998	20071994
D20398094	302	106	96	100	99.9630569	99.9556683	99.9532054	99.8916336	22081995
D20428934	299	77	106	116	99.9605940	98.9237248	99.9926114	100.0000000	14101993
C20672438	303	99	110	94	99.9588637	99.7047863	100.0000000	99.7096259	21081994
B20030697	320	115	105	100	99.9539043	99.9692695	99.8463477	99.7203528	04031994
B20656224	320	115	105	100	99.9539043	99.9692695	99.8463477	99.7203528	11071994
B20410215	320	115	105	100	99.9539043	99.9692695	99.8463477	99.7203528	10061995
D20032939	287	106	95	86	99.9310396	99.9556683	99.9433539	99.2611383	28041994
D20690279	287	106	91	90	99.9310396	99.9556683	99.9064109	99.5024998	19071995
A20074407	314	101	102	111	99.9286020	99.3788376	99.4859346	100.0000000	13041995
A20751862	310	110	110	90	99.9071826	99.9143224	99.8714836	99.4181065	22031994
A20685124	310	110	110	90	99.9071826	99.9143224	99.8714836	99.4181065	23021996
B20236444	312	120	103	89	99.8770781	100.0000000	99.7695215	98.7892198	16031994
C20430859	284	102	90	92	99.8741712	99.8112568	99.7870590	99.6346126	11101994
C20518247	284	102	76	106	99.8741712	99.8112568	99.0611237	99.9733824	05081994
B20128586	311	120	91	100	99.8740051	100.0000000	99.2102271	99.7203528	06021995
Normalatio	n Proced	ure_Perc	entile S	corePag	ge 7 of 11				

7,000,115		96	88	98	99.8620723	99.6249335	99.7338237	99.8572327	31071994
B20001667	305	120	91	94	99.8033250	100.0000000	99.2102271	99.2225193	04011995
B20042147	304	120	87	97	99.7848868	100.0000000	98.8445346	99.5544083	27091994
D20840699	260	95	80	85	99.7758786	99.8029702	99.6281063	99.1798636	02021995
D20084751	260	95	80	85	99.7758786	99.8029702	99.6281063	99.1798636	22021995
B20051256	301	106	120	75	99.7480102	99.5667005	100.0000000	96.2754679	11011995
B20481968	299	120	90	89	99.7111336	100.0000000	99.1088166	98.7892198	02091994
B20091701	299	90	120	89	99.7111336	97.6491196	100.0000000	98.7892198	19081994
A20397755	295	120	90	85	99.6608596	100.0000000	98.2400400	98.9147508	01111994
B20549576	294	120	78	96	99.6281614	100.0000000	97.8365754	99.4407056	30101993
B20098269	288	120	83	85	99.5113856	100.0000000	98.4235272	98.2452906	21081994
B20914176	258	120	59	79	98.5648874	100.0000000	94.5945115	97.2066009	30121994
C20361875	171	54	57	60	96.2832115	93.3480134	96.5203504	95.0878382	14081994
C20860609	171	54	57	60	96.2832115	93.3480134	96.5203504	95.0878382	14081994
C20861476	60	35	20	5	67.0014035	81.8056429	73.0460243	27.9122102	17081994
C20512680	60	35	20	5	67.0014035	81.8056429	73.0460243	27.9122102	17081994
C20069270	60	28	8	24	67.0014035	72.7653293	44.3256062	68.2766297	10101994
C20355550	60	28	8	24	67.0014035	72.7653293	44.3256062	68.2766297	10101994
B20071356	71	29	17	25	62.1124120	55.9110046	61.5899942	62.0202206	21041994
B21253378	71	29	17	25	62.1124120	55.9110046	61.5899942	62.0202206	21041994
D21237483	55	20	15	20	57.4859001	64.2415585	46.8167377	56.5573972	11041995
D21077463	55	20	15	20	57.4859001	64.2415585	46.8167377	56.5573972	11041995
D20348188	55	5	35	15	57.4859001	29.7441076	85.5404773	44.9326404	01061994
D20777569	55	5	35	15	57.4859001	29.7441076	85.5404773	44.9326404	01061994
A20471411	50	25	15	10	49.7144081	63.5834642	43.5277738	38.7119806	30111994
A20922992	50	25	15	10	49.7144081	63.5834642	43.5277738	38.7119806	30111994
A21004667	50	25	5	20	49.7144081	63.5834642	20.6197344	61.1595031	16031995
A21141123	50	25	5	20	49.7144081	63.5834642	20.6197344	61.1595031	16031995
B21180340	52	25	15	12	46.4521680	49.4207308	57.7425402	33.7359024	23121994
B20472057	52	25	15	12	46.4521680	49.4207308	57.7425402	33.7359024	23121994
A20180792	-39	-5	-10	-24	0.0035699	3.8876196	1.7599600	0.0249893	12051995
B20236060	-38	0	-25	-13	0.0030730	4.6679573	0.0245844	0.4148613	08081995
D21277410	-44	-13	-13	-18	0.0024629	1.3890599	0.5295175	0.0837377	17071995
C21082034	-49	-13	-17	-19	0.0024198	0.5323525	0.3750665	0.1742245	19091994

# NTA SCORE AND OVERALL MERIT /RANK LIST

ROLL NO	ROLL NO RAW SCORE			NTA SCORE			DATE	RANK		
	TOTAL MATH PHY CHE			TOTAL MATH PHY CHE				OF BIRTH		
C20150694	331	120	110	101	100.0000000	100.0000000	100.0000000	99.9201471	07041995	1
D20479616	332	120	101	111	100.0000000	100.0000000	99.9778342	99.9926114	25081994	2
A20020720	335	115	115	105	100.0000000	99.9964301	99.9750107	99.9571612	22011995	3
B20123935	346	115	116	115	100.0000000	99.9692695	99.9938539	99.9938539	21081994	4
C20087997	321	115	95	111	99.9975802	99.9903209	99.9080482	99.9975802	04101993	5
C20121991	321	106	110	105	99.9975802	99.9007888	100.0000000	99.9661230	22051995	6
D20040337	330	120	110	100	99.9975371	100.0000000	100.0000000	99.8916336	23091994	7
B20012622	345	115	110	120	99.9969270	99.9692695	99.9600504	100.0000000	24061994	8
A20411664	332	111	115	106	99.9964301	99.9500214	99.9750107	99.9750107	23081994	9
D20568599	320	120	100	100	99.9950743	100.0000000	99.9704455	99.8916336	19061995	10
D20007708	320	105	110	105	99.9950743	99.9285767	100.0000000	99.9630569	04111993	11
B20621750	336	115	110	111	99.9938539	99.9692695	99.9600504	99.9815617	06111994	12
A20018569	330	115	110	105	99.9928602	99.9964301	99.8714836	99.9571612	03091994	13
A20339879	330	110	120	100	99.9928602	99.9143224	100.0000000	99.8679138	10011994	14
A20027230	330	110	110	110	99.9928602	99.9143224	99.8714836	99.9964301	17071994	15
C20058572	316	111	90	115	99.9927406	99.9661230	99.7870590	100.0000000	22061995	16
C20076289	316	105	100	111	99.9927406	99.8765910	99.9685428	99.9975802	11121994	17
B20298730	331	115	110	106	99.9907809	99.9692695	99.9600504	99.9416121	11121993	18
D20563271	311	110	90	111	99.9901485	99.9827599	99.8867079	99.9926114	31031995	19
D20265618	311	105	106	100	99.9901485	99.9285767	99.9926114	99.8916336	01091997	20
C20060310	315	110	95	110	99.9879011	99.9491845	99.9080482	99.9927406	05111994	21
C20008597	315	110	95	110	99.9879011	99.9491845	99.9080482	99.9927406	29121994	22
C20241896	315	110	95	110	99.9879011	99.9491845	99.9080482	99.9927406	11011995	23
D20074767	310	103	102	105	99.9852228	99.9088737	99.9827599	99.9630569	14091993	25
B20197060	328	120	106	102	99.9846348	100.0000000	99.9047356	99.8248364	24111993	26
B20035799	328	115	97	116	99.9846348	99.9692695	99.5697735	99.9969270	02121994	27
D20840372	308	106	101	101	99.9827599	99.9556683	99.9778342	99.9162623	15061995	28
C20388248	307	94	110	103	99.9709626	99.4991047	100.0000000	99.9419252	23111993	46
D20563852	304	103	96	105	99.9704455	99.9088737	99.9532054	99.9630569	04061995	47
B20175737	321	115	106	100	99.9692695	99.9692695	99.9047356	99.7203528	28101994	48
B20272584	321	115	105	101	99.9692695	99.9692695	99.8463477	99.7941059	26081994	49
D20467385	303	103	110	90	99.9679827	99.9088737	100.0000000	99.5024998	20071994	53
D20398094	302	106	96	100	99.9630569	99.9556683	99.9532054	99.8916336	22081995	60
D20428934	299	77	106	116	99.9605940	98.9237248	99.9926114	100.0000000	14101993	62
C20672438	303	99	110	94	99.9588637	99.7047863	100.0000000	99.7096259	21081994	64
B20030697	320	115	105	100	99.9539043	99.9692695	99.8463477	99.7203528	04031994	68
B20656224	320	115	105	100	99.9539043	99.9692695	99.8463477	99.7203528	11071994	69
B20410215	320	115	105	100	99.9539043	99.9692695	99.8463477	99.7203528	10061995	70
D20032939	287	106	95	86	99.9310396	99.9556683	99.9433539	99.2611383	28041994	103
D20690279	287	106	91	90	99.9310396	99.9556683	99.9064109	99.5024998	19071995	104
A20074407	314	101	102	111	99.9286020	99.3788376	99.4859346	100.0000000	13041995	109
A20751862	310	110	110	90	99.9071826	99.9143224	99.8714836	99.4181065	22031994	140
A20685124	310	110	110	90	99.9071826	99.9143224	99.8714836	99.4181065	23021996	141
B20236444	312	120	103	89	99.8770781	100.0000000	99.7695215	98.7892198	16031994	181
C20430859	284	102	90	92	99.8741712	99.8112568	99.7870590	99.6346126	11101994	186
C20518247	284	102	76	106	99.8741712	99.8112568	99.0611237	99.9733824	05081994	187
Normalation Procedure_Percentile ScorePage 9 of 11										

B20128586	311	120	91	100	99.8740051	100.0000000	99.2102271	99.7203528	06021995	188
C20045510	282	96	88	98	99.8620723	99.6249335	99.7338237	99.8572327	31071994	202
B20001667	305	120	91	94	99.8033250	100.0000000	99.2102271	99.2225193	04011995	291
B20042147	304	120	87	97	99.7848868	100.0000000	98.8445346	99.5544083	27091994	314
D20840699	260	95	80	85	99.7758786	99.8029702	99.6281063	99.1798636	02021995	327
D20084751	260	95	80	85	99.7758786	99.8029702	99.6281063	99.1798636	22021995	328
B20051256	301	106	120	75	99.7480102	99.5667005	100.0000000	96.2754679	11011995	367
B20481968	299	120	90	89	99.7111336	100.0000000	99.1088166	98.7892198	02091994	420
B20091701	299	90	120	89	99.7111336	97.6491196	100.0000000	98.7892198	19081994	426
A20397755	295	120	90	85	99.6608596	100.0000000	98.2400400	98.9147508	01111994	494
B20549576	294	120	78	96	99.6281614	100.0000000	97.8365754	99.4407056	30101993	542
B20098269	288	120	83	85	99.5113856	100.0000000	98.4235272	98.2452906	21081994	712
B20914176	258	120	59	79	98.5648874	100.0000000	94.5945115	97.2066009	30121994	2069
C20361875	171	54	57	60	96.2832115	93.3480134	96.5203504	95.0878382	14081994	5365
C20860609	171	54	57	60	96.2832115	93.3480134	96.5203504	95.0878382	14081994	5366
C20861476	60	35	20	5	67.0014035	81.8056429	73.0460243	27.9122102	17081994	47439
C20512680	60	35	20	5	67.0014035	81.8056429	73.0460243	27.9122102	17081994	47440
C20069270	60	28	8	24	67.0014035	72.7653293	44.3256062	68.2766297	10101994	47521
C20355550	60	28	8	24	67.0014035	72.7653293	44.3256062	68.2766297	10101994	47522
B20071356	71	29	17	25	62.1124120	55.9110046	61.5899942	62.0202206	21041994	54533
B21253378	71	29	17	25	62.1124120	55.9110046	61.5899942	62.0202206	21041994	54534
D21237483	55	20	15	20	57.4859001	64.2415585	46.8167377	56.5573972	11041995	61208
D21077463	55	20	15	20	57.4859001	64.2415585	46.8167377	56.5573972	11041995	61209
D20348188	55	5	35	15	57.4859001	29.7441076	85.5404773	44.9326404	01061994	61451
D20777569	55	5	35	15	57.4859001	29.7441076	85.5404773	44.9326404	01061994	61452
A20471411	50	25	15	10	49.7144081	63.5834642	43.5277738	38.7119806	30111994	72275
A20922992	50	25	15	10	49.7144081	63.5834642	43.5277738	38.7119806	30111994	72276
A21004667	50	25	5	20	49.7144081	63.5834642	20.6197344	61.1595031	16031995	72290
A21141123	50	25	5	20	49.7144081	63.5834642	20.6197344	61.1595031	16031995	72291
B21180340	52	25	15	12	46.4521680	49.4207308	57.7425402	33.7359024	23121994	77107
B20472057	52	25	15	12	46.4521680	49.4207308	57.7425402	33.7359024	23121994	77108
A20180792	-39	-5	-10	-24	0.0035699	3.8876196	1.7599600	0.0249893	12051995	142479
B20236060	-38	0	-25	-13	0.0030730	4.6679573	0.0245844	0.4148613	08081995	142480
D21277410	-44	-13	-13	-18	0.0024629	1.3890599	0.5295175	0.0837377	17071995	142481
C21082034	-49	-13	-17	-19	0.0024198	0.5323525	0.3750665	0.1742245	19091994	142482

# Compilation and display of Result for multi session Papers of JEE(Main) for

examinations conducted twice (First and Second attempt) before admissions to the next academic session.

## (a) Compilation of Result for First attempt:

Since, first attempt will be conducted in multi-sessions, NTA scores will be calculated corresponding to the raw marks obtained by a candidate in each session as per above procedure. The calculated NTA scores for all the sessions will be merged for declaration of result. The result shall comprise the four NTA scores for each of the three subjects (Mathematics, Physics, and Chemistry) and the total for the first attempt.

#### (b) Compilation of Result for Second attempt:

Similarly, second attempt will be conducted in multi-sessions, NTA scores will be calculated corresponding to the raw marks obtained by a candidate in each session as per above procedure. The calculated NTA scores for all the sessions will be merged for declaration of result. The result shall comprise the four NTA scores for each of the three subjects (Mathematics, Physics, and Chemistry) and the total for the second attempt.

# (c) Compilation of Result and Preparation of Merit List / Ranking:

The four NTA scores for each of the candidates for the first attempt as well as for the second attempt will be merged for compilation of result and preparation of overall Merit List / Ranking. Those appeared in both the attempts; their best of the two NTA scores will be considered further for preparation of **Merit List /Ranking** as explained in the following example:

#### **EXAMPLE**

Roll No		First Attempt – NTA Score	Second Attempt-NTA Score	Final NTA Score for compilation of result (best of the two in Total)		
C20045511	Total	99.8620723	99.8740051	99.8740051		
	Mathematics	99.6249335	100.0000000	100.0000000		
	Physics	99.7338237	99.2102271	99.2102271		
	Chemistry	99.8572327	99.7203528	99.7203528		
C20045512	Total		99.8620723	99.8620723		
	Mathematics	1	99.6249335	99.6249335		
	Physics	Did not Appear	99.7338237	99.7338237		
	Chemistry		99.8572327	99.8572327		
C20045513	Total	99.8740051		99.8740051		
	Mathematics	100.0000000		100.0000000		
	Physics	99.2102271	Did not Appear	99.2102271		
	Chemistry	99.7203528		99.7203528		
C20045514	Total	99.8740051	99.8620723	99.8740051		
	Mathematics	100.0000000	99.6249335	100.0000000		
	Physics	99.2102271	99.7338237	99.2102271		
	Chemistry	99.7203528	99.8572327	99.7203528		