ANNEX "C"

2023 Philippine Educational Placement Test (PEPT)

Priority A

A.1. Printing and Processing of Certificate of Rating (COR) per examinee using BEA approved format
A.2. Master List of examinees by testing center, grade level, individual raw score, mean raw score, and mean percentage score.
A.3. Electronic file of Master List by Regional Testing Center.
A.4. School Header's data – crosstabs with frequency counts and percent, MPS by variable.
A.5. Quartile Distribution by subtests vis a vis to Region, and Division Testing Centers.

Priority B

B.1. Frequency and percent distribution of total examinees.

b.1.1. Number of passers by grade level per Division
b.1.2. Number of passers by grade level per Region (17 Regions)
b.1.3. Overall number of passers by grade level as to National rating.

B.2. Frequency, percentage distribution and MPS, of demographic characteristics by 21st century skills of total examinees.

b.2.1. Gender
b.2.2. Municipality type (Rural, Urban)
b.2.3. Class Size
b.2.4. School Type
b.2.5. Legislative District
b.2.6. School Type (Public vs. Private)
b.2.7. Region
b.2.8. Division
b.2.9. Teacher given grades by subject.
b.2.10. EDQ Variables
b.2.11. School Header variables
b.2.12. IP
b.2.13. Type of Public School: Central, Non-Central, Vocational, TEI's, Madaris School
b.2.14. Type of Private School: Sectarian, Non-Sectarian, etc.

B.3. Regional and Division Level Analysis

b.3.1. Do the same as the foregoing for each of the Seventeen (17) Regions Examples (Sample Table) Regional N, Mean, Raw % Score, SD, Lowest and Highest and for each of the 5 tests and Overall Test
b.3.2. Division N, Mean (Raw and Percent) Scores, SD, Lowest and Highest scores per Test, for Overall Test
b.3.3. Mean, N, SD, by Subtest and for Total test by SCHOOL, DIVISION, and REGION Cluster

Descriptive Statistics for Total and Subtests by Cluster

School Cluster	N	MPS
Cluster 1		
Cluster 2		
Cluster 3		
Cluster 4		
Cluster 5		
Cluster 6		

Cluster Scale:

Cluster	Schools with examinees of:
Cluster 1	**400 and above**
Cluster 2	**200 to 399**
Cluster 3	**100 - 199**
Cluster 4	**55 - 99**
Cluster 5	**20 - 54**
Cluster 6	**19 and below**

B.4. Three Year Trend using MPS by Subtest

b.4.1. Individual score represented by the highest and lowest Raw Score by subject area and Overall Test
b.4.2. Three Year trend using MPS by mastery level starting School Year 2016 – 2017
b.4.3. Frequency and Percentage **Distribution of Examinees** and School type based on the Criteria of **mastery level** by subtest
b.4.4. Frequency and Percentage **Distribution of Testing Center** by type based on the mastery level by subtest.

CRITERIA FOR ACHIEVEMENT LEVEL

ACHIEVEMENT LEVEL	
MPS	**Descriptive Equivalent**
96 – 100	**Mastered**
86 – 95	**Closely Approximating Mastery**
66 – 85	**Moving Towards Mastery**
35 – 65	**Average Mastery**
15 – 34	**Low Mastery**
5 – 14	**Very Low Mastery**
0 – 4	**Absolutely No Mastery**

b.4.5. Frequency and Percentage Distribution of scores based on the criteria on quartile distribution by:

b.4.5.1. subject and overall test
b.4.5.2. distribution of examines
b.4.5.3. distribution of school
b.4.5.4. distribution of division
b.4.5.5. distribution of region

Quartile Distribution of Scores	
Quartile	**Descriptive Equivalent**
76 – 100	*Q1 Superior*
51 – 75	*Q2 Upper Average*
26 – 50	*Q3 Lower Average*
0 – 25	*Q4 Poor*

Priority C

C.1. Electronic copy of the Graphical Presentation of Percentage of Correct Response (PCR) by 21st century skills vis a vis by its subject area and mastery levels through regional and national performance.

C.2. Electronic copies of Institutional Performance profile (IPP) by Division. The IPP contains the subject area and overall test MPS and SD. (Division, Region, and National Performance should appear after the last school of the division)

Priority D:

D.1. GUIDELINES FOR GENERATING INFERENTIAL STATISTICS

Stage 1 → 10 Regions:

Regions I, III, IV-A, V and NCR – Luzon
Regions VI, NIR and VII – Visayas
Regions X, XII – Mindanao

Stage 2 → Division Level – 4 division per region

Cluster 1 – per region
Cluster 2 – per region
Cluster 3 – per region
Cluster 4 – per region

Stage 4 → 80 – 100 students per school

- Male – Female almost equal distribution

Stage 5 → All variables indicated on Priority B.2.

D.2. Comparison and Inferential Statistics per Subject and 21st-century skills.

d.2.1. T-test of differences on means or ANOVA and Chi-Square by Percentile Grouping

d.2.1.1. Gender

Sample table (for total examinees): t-test of difference of Means of Males vs. Females by subtests (Region I)

Test	Mean Score		Std. Deviation		Diff. between means	t-ratio/ F – ratio	Probability
	Male	Female	Male	Female			
Math							
Science							
English							
Filipino							
Aralin Panlipunan							
Total Test							

CHI–SQUARE BY PERCENTILE GROUPING

Variable Labels	PERCENTILE GROUPING IN MPS								
	20 & below	21-29	30-40	41-50	51-60	61-70	71-80	81-90	91-99

d.2.1.2. Do the same as of # 3.1 for each of the 17 other Regions
d.2.1.3. Do the same for:
d.2.1.3.1. Community type (urban vs. rural) for whole population
d.2.1.3.2. Madrasah vs. Non Madrasah
d.2.1.3.3. Special Science Classes vs. Non- Special Science Classes

D.3. Correlation and Regression Analysis

d.3.1. Correlations between 21st century skills score on 5 subtests and total test with some examinee characteristics *(please see appendix 4: sample table format for 21st century skills score and examinee characteristics)*
d.3.2.1. Gender
d.3.2.2. Cluster Type
d.3.2.3. School Type
d.3.2.4. Number of Siblings
d.3.2.5. Community Type
d.3.2.6. Teacher-given grades in
- Math
- Science
- English
- Filipino
- Aralin Panlipunan

d.3.2.7. Madrasah
d.3.2.8. IP
d.3.2.9. SPED

d.3.3. Split-half reliability coefficient for each of the 5 subtests and Total tests GSA & TVA

d.3.4. Kuder-Richardson alpha Reliability

D.4. One-way ANALYSIS OF VARIANCE OF scores on each of the 5 subtests of NAT based on the overall 21st century skills raw data.

d.4.1. Across the 17 regions

d.4.2. Across the 5 cluster types

d.4.3. If F is significant in the one-way ANOVA and D.2 has a significant relationship, do a test or Schiff test of Duncan test on the data to identify significantly different group.

D.5. Test Validation and Development

d.5.1. Item Analysis and Item Validation Tests

d.5.1.1. Do an item analysis of each of the 5 subtests to produce the following facility:

d.5.1.1.1. Facility/difficulty indices

d.5.1.1.2. Discrimination indices

d.5.1.1.3. Frequency of choosers per option (option analysis)

d.5.2. If possible print out an item analysis matrix like the following for each of the subject tests.

Table ___: Item Analysis Index for subtests

Discrimination Index (DI)

Facility Level (%)	**≤ .00**	**.01 - .15**	**.16 – .30**	**.31 -.45**	**.46 - .60**	**≥.61 and above**	**Total No. of Items**
81 – 100							
61 – 80							
41 – 60							
21 – 40							
0 – 20							
Total Items							

Where: $F1 = \frac{\mu - l}{(U + L)} \times 100\%$ $\qquad D.I = \frac{\mu - l}{U}$

Where: μ – number of examinees among the highest scoring 27% of the ranked Distribution who answered the item correctly

l – number of examinees in the L group who answered the item correctly

U – number of examinees in the top 27% of the test takers

L – number of examinees in the bottom 27% of the test takers

Note: $U = L$

F1 -Facility Index

DI – Discrimination Index

d.5.3. Generate an Item Analysis Report per Grade level for the Philippine Educational Placement Test (PEPT) following the **Classical Test Theory Approach.**

d.5.4. Generate the R Markdown report per Grade level following the **Item Response Theory** approach, which deals primarily with the following:

- IRT ability measures
- IRT item difficulty
- IRT test reliability
- IRT Item Discrimination
- Parallel ICCs
- WrightMap
- IRT item analysis
- R markdown

Conditions:

- *All data/statistical outputs required by the BEA should also be in electronic file and submitted to the BEA.*
- *Computed and validated data file of scanned data (includes scores of each subtest, division and region code) should also be submitted to BEA*
- ***Any statistical data not indicated herein but emerged necessary should also be generated.***