THE OPEN UNIVERSITY OF SRI LANKA
FACULTY OF EDUCATION
BACHELOR OF EDUCATION (HONOURS) IN PRIMARY EDUCATION
LEVEL - 06
FINAL EXAMINATION – 2022/2023
EPU6533 – ASSESSMENT IN PRIMARY EDUCATION

DURATION – THREE (03) HOURS

Date: 23.03.2024 Time: 9.30 a.m. – 12.30 p.m.

Answer All Questions in Part I and any three (03) questions from Part II.

Calculators can be used. Probability distribution table and the formulas will be given.

PART - I

01. Define the terms of Measurement, Assessment and Evaluation in relation to education.
02. List out the **seven (07)** steps involved in assessment.
03. State **three (03)** domains of learning and explain in brief.
04. Describe qualities of learning objectives.
05. Name **five (05)** purposes of assessment.
06. Explain criterion-referenced assessment with relevant examples.
07. Differentiate traditional assessment and authentic assessment.
08. Explain the term 'Blue Print'.

(5 x 8 = 40 marks)

PART – II

09. i. List out **five (05)** different types of tests and explain in brief. (05 marks)
    ii. Write **one (01)** essay type question in relevant primary students. (05 marks)
    iii. Convert above essay type question into structure type questions. (05 marks)
    iv. Explain advantage and disadvantage of essay type question. (05 marks)

10. i. Discuss Bloom's Taxonomy of Educational Objectives for cognitive domain. (04 marks)

ii. Explain learning aims, objectives and specific learning objectives with relevant examples. (06 marks)

iii. Prepare a question paper (**at least 10 questions**) for Grade4, Environmental Related Activities. (any theme). Your questions should cover all levels in Boom taxonomy. (10 marks)

11. A teacher tried to prepare frequency distribution for her students. Environmental Related Activities' term test marks. She has recorded the tally mark against the class intervals. Her table given below.

Class Interval	**Tally mark**	**Frequency**
11-20	///	
31-30	////	
31-40	~~////~~ ////	
41-50	~~////~~ ~~////~~	
51-60	~~////~~ ////	
61-70	~~////~~ //	
71-80	~~////~~	
81-90	///	
Total number of student		

i. Copy above table in your answer script and fill the frequency column (01 mark)

ii. How many students in the class. (01 mark)

iii. Draw cumulative frequency curve. (03 marks)

iv. Find the mode of this distribution. (02 marks)

v. Calculate the median of this distribution. (03 marks)

vi. Considering the assumed mean of this distribution to be in the class interval (41-50) calculate arithmetic mean. (05 marks)

vii. Calculate the Standard Deviation (SD) of the distribution the above distribution. (05 marks)

12. i. Explain the terms 'Correlation' and 'Correlation coefficient' (04 marks)

ii. Explain with diagram and a relevant example 'perfect negative correlation'. (02 marks)

iii. Following marks were obtained by 11 students in Grade 4 for the Environment Related Activities (ERA) and Mathematics.

Subject / Student	ERA	Mathematics
Ramani	70	55
Rani	69	82
Careem	87	89
Dilan	91	65
Kethees	67	20
Nayana	34	20
Prasath	44	89
Neel	91	53
Anne	44	67
Piyal	61	76
Vive	44	90

a. Show the marks in scatterplot. (02 marks)

b. Find the Spearman's rank correlation coefficient for ERA and Mathematics.

(10 marks)

c. Interpret your answer. (02 marks)

13. Answer **A or B** only.

A. i. State **four (04)** special characteristics of the normal probability curve

(02 marks)

ii. Marks of 3000 students are distributed according to the normal probability curve. Mean and standard deviation of this set of marks are 55 and 12 respectively.

a. Find the number of students who scored more than 50 marks.

(04 marks)

b. Find the number of students who scored between 45 and 75 marks.

(05 marks)

c. If those scored less than 35 marks fail the test, find number of students failing the test. (04 marks)

d. If the best 14% of the students are expected to be given 'A' grades, what is the minimum marks required to obtain an 'A' grade. (05 marks)

B.

i. Define Z-score. (02 marks)

ii. The marks obtained by **three (03)** students William, Oliver and Emily for three subjects Language, Mathematics and Environmental Related Activities (ERA) in a term test and the means and Standard Deviation (SD) of each subject given below table.

Student / Subject	William	Oliver	Emily	Mean	SD
Language	90	51	66	70	12
Mathematics	65	89	49	65	10
ERA	50	64	91	51	14

a. According to the raw marks, who is the best student? (01 marks)

b. After converting marks of each students into standard Scores (Z-score) decide who is the best. (09 marks)

c. Out of the Language, Mathematics and Environmental Related Activities (ERA) for which subject students has show best attainment level. (02 marks)

d. Convert Emily's mathematics marks into Hull Scale (03 marks)

e. Convert William's Language marks into Mc call's scale. (03 marks)

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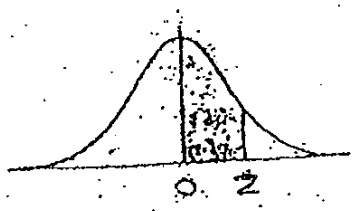
இலங்கை திறந்த பல்கலைக்கழகம்
The open university of Sri Lanka

සම්මත ප්‍රමිත වක්‍රය යට ක්ෂේත්‍රවල - (0 සිට Z දක්වා)
நியம வளையி இன் பரப்பளவுகள் - 0 முதல் Z வரை
Areas Under the Standard Normal Curve – from 0 to z



Z	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09
0.0	0.0000	0.0040	0.0080	0.0120	0.0160	0.0199	0.0239	0.0279	0.0319	0.0359
0.1	0.0398	0.0438	0.0478	0.0517	0.0557	0.0596	0.0636	0.0675	0.0714	0.0753
0.2	0.0793	0.0832	0.0871	0.0910	0.0948	0.0987	0.1026	0.1064	0.1103	0.1141
0.3	0.1179	0.1217	0.1255	0.1293	0.1331	0.1368	0.1406	0.1443	0.1480	0.1517
0.4	0.1554	0.1591	0.1628	0.1664	0.1700	0.1736	0.1772	0.1808	0.1844	0.1879
0.5	0.1915	0.1950	0.1985	0.2019	0.2054	0.2088	0.2123	0.2157	0.2190	0.2224
0.6	0.2257	0.2291	0.2324	0.2357	0.2389	0.2422	0.2454	0.2486	0.2517	0.2549
0.7	0.2580	0.2611	0.2642	0.2673	0.2704	0.2734	0.2764	0.2794	0.2823	0.2852
0.8	0.2881	0.2910	0.2939	0.2967	0.2995	0.3023	0.3051	0.3078	0.3106	0.3133
0.9	0.3159	0.3186	0.3212	0.3238	0.3264	0.3289	0.3315	0.3340	0.3365	0.3389
1.0	0.3413	0.3438	0.3461	0.3485	0.3508	0.3531	0.3554	0.3577	0.3599	0.3621
1.1	0.3643	0.3665	0.3686	0.3708	0.3729	0.3749	0.3770	0.3790	0.3810	0.3830
1.2	0.3849	0.3869	0.3888	0.3907	0.3925	0.3944	0.3962	0.3980	0.3997	0.4015
1.3	0.4032	0.4049	0.4066	0.4082	0.4099	0.4115	0.4131	0.4147	0.4162	0.4177
1.4	0.4192	0.4207	0.4222	0.4236	0.4251	0.4265	0.4279	0.4292	0.4306	0.4319
1.5	0.4332	0.4345	0.4357	0.4370	0.4382	0.4394	0.4406	0.4418	0.4429	0.4441
1.6	0.4452	0.4463	0.4474	0.4484	0.4495	0.4505	0.4515	0.4525	0.4535	0.4545
1.7	0.4554	0.4564	0.4573	0.4582	0.4591	0.4599	0.4608	0.4616	0.4625	0.4633
1.8	0.4641	0.4649	0.4656	0.4664	0.4671	0.4678	0.4686	0.4693	0.4699	0.4706
1.9	0.4713	0.4719	0.4726	0.4732	0.4738	0.4744	0.4750	0.4756	0.4761	0.4767
2.0	0.4772	0.4778	0.4783	0.4788	0.4793	0.4798	0.4803	0.4808	0.4812	0.4817
2.1	0.4821	0.4826	0.4830	0.4834	0.4838	0.4842	0.4846	0.4850	0.4854	0.4857
2.2	0.4861	0.4864	0.4868	0.4871	0.4875	0.4878	0.4881	0.4884	0.4887	0.4890
2.3	0.4893	0.4896	0.4898	0.4901	0.4904	0.4906	0.4909	0.4911	0.4913	0.4916
2.4	0.4918	0.4920	0.4922	0.4925	0.4927	0.4929	0.4931	0.4932	0.4934	0.4936
2.5	0.4938	0.4940	0.4941	0.4943	0.4945	0.4946	0.4948	0.4949	0.4951	0.4952
2.6	0.4953	0.4955	0.4956	0.4957	0.4959	0.4960	0.4961	0.4962	0.4963	0.4964
2.7	0.4965	0.4966	0.4967	0.4968	0.4969	0.4970	0.4971	0.4972	0.4973	0.4974
2.8	0.4974	0.4975	0.4976	0.4977	0.4977	0.4978	0.4979	0.4979	0.4980	0.4981
2.9	0.4981	0.4982	0.4982	0.4983	0.4984	0.4984	0.4985	0.4985	0.4986	0.4986
3.0	0.4987	0.4987	0.4987	0.4988	0.4988	0.4989	0.4989	0.4989	0.4990	0.4990
3.1	0.4990	0.4991	0.4991	0.4991	0.4992	0.4992	0.4992	0.4992	0.4993	0.4993
3.2	0.4993	0.4993	0.4994	0.4994	0.4994	0.4994	0.4994	0.4995	0.4995	0.4995
3.3	0.4995	0.4995	0.4995	0.4996	0.4996	0.4996	0.4996	0.4996	0.4996	0.4997
3.4	0.4997	0.4997	0.4997	0.4997	0.4997	0.4997	0.4997	0.4997	0.4997	0.4998
3.5	0.4998	0.4998	0.4998	0.4998	0.4998	0.4998	0.4998	0.4998	0.4998	0.4998
3.6	0.4998	0.4998	0.4999	0.4999	0.4999	0.4999	0.4999	0.4999	0.4999	0.4999
3.7	0.4999	0.4999	0.4999	0.4999	0.4999	0.4999	0.4999	0.4999	0.4999	0.4999
3.8	0.4999	0.4999	0.4999	0.4999	0.4999	0.4999	0.4999	0.4999	0.4999	0.4999
3.9	0.5000	0.5000	0.5000	0.5000	0.5000	0.5000	0.5000	0.5000	0.5000	0.5000

Some important formulas / වැදගත් සූත්‍ර කිහිපයක්
சில முக்கிய சூத்திரங்கள்

$$\rho = \left[1 - \frac{6\sum D^2}{N(N^2-1)}\right]$$

$$A.M_{(\overline{x})} = \left(A + \frac{i\sum fd}{N}\right)$$

$$SD_{(\sigma)} = i\sqrt{\frac{\sum fd^2}{N} - \left(\frac{\sum fd}{N}\right)^2}$$

$$\gamma_{xy} = \frac{\sum XY}{\sqrt{(\sum X^2)(\sum Y^2)}}$$

$$\gamma_{xy} = \frac{\sum(x - \bar{x})(y - \bar{y})}{\sqrt{\sum(x - \bar{x})^2 \times \sum(y - \bar{y})^2}}$$

$$\gamma_{xy} = \frac{n\sum xy - (\sum x)(\sum y)}{\sqrt{[n\sum x^2 - (\sum x)^2][n\sum y^2 - (\sum y)^2]}}$$