

CARMEL COLLEGE OF ARTS, SCIENCE & COMMERCE FOR WOMEN,
NUVEM – GOA.
SEMESTER END REPEAT EXAMINATION, AUGUST 2020

B.A. Semester – V (Under CBCS Ordinance)
PSYCHOLOGY-Statistics for Psychology BA505

Total Marks: 30

Date: 14th August 2020

Duration: 2 hours

Total No of pages: 02

Instructions: *All questions are compulsory.*
Figures to the right indicate marks.

Q1. Write short notes on any five of the following:

5x2=10

a. Variables and constants along with continuous and discrete variables.

b. Calculate the mean for the following scores.

7891	2964	3895	6582	5234	4455	1099	8758
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a. Calculate the mode for the following scores.

799.5	625.5	1021.5	552.5	2102.5	625.5	857.5	625.5
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b. Calculate the Z scores for the following data.

	Test score X	Mean μ	SD σ
	75	80	10

c. Define kurtosis and draw a figure depicting leptokurtic distribution.

d. Type I errors.

e. Types of correlation.

Q2. Answer any four of the following:

4x5=20

a. Discuss the various scales of measurement with suitable examples.

b. Find out the median and mode for the following sets of data.

29	45	33	30	42	35	38	29	32	21	29	24
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90	73	72	83	54	64	70	67	59	78	75	64
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□ Personality

Certain personality characteristics can contribute to job satisfaction and job performance. E.g. empathy and nurturance are important traits for counselors to have; autonomy and persistence are vital to investigative reporters; and orderliness and precision are needed by accountants.

Personality tests: assessments of personal traits and feelings.

Personality test scores have been found to correlate with job success. Their predictive validities can be as high as those for assessment centers.

They are popular selection techniques and their use is expected to increase.

2 approaches to personality assessment are self-report inventories and projective tests.

- Self-report personality inventories: *personality assessment tests that include questions dealing with situations, symptoms and feelings; applicants are asked to indicate how well each item describes themselves or how much they agree with each item.*
- Projective techniques: *a personality assessment technique in which applicants project their feelings onto an ambiguous stimulus such as an inkblot.*

The task is to tell what is seen in the figure or picture.

The rationale is that people will project their thoughts, wishes and feelings onto the stimulus in an effort to give it meaning.

These tests cannot be faked because there are no right and wrong answers.

They are time-consuming and must be administered individually.

c. Answer the following questions based on the frequency table below.

Class Intervals	Frequencies
170-179	2
160-169	3
150-159	10
140-149	19
130-139	21
120-129	22
110-119	18
100-109	2
90-99	3

1. Calculate the range of the frequency distribution.
2. Which class interval has the highest frequency?
3. Calculate the midpoint for the class interval 130-139.
4. Calculate the upper class and lower class limit for the class interval of 90-99.
5. Calculate the total no of frequencies for the above table.

d. Compute the standard deviation for the following scores.

20	18	16	14	13	11	10	9	8	5
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e. Differentiate between null hypothesis and alternate hypothesis.

f. Distinguish between percentiles and percentile ranks.

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Distinction in terms of the characteristics or behaviors they are designed to measure. The basic categories are tests of: cognitive abilities,

- Cognitive Abilities

Cognitive ability tests (intelligence tests): *tests of intelligence or mental ability.*

Widely used for employee selection > e.g. a survey of personnel practices in departments of law enforcement found that 92% used intelligence to select police officers (Ash, Slora & Britton, 1990).

- Interests

Interest tests: *psychological tests to assess a person's interests and preferences; used primarily for career counseling.*

- Aptitudes

Aptitude tests: *tests to measure specific abilities such as mechanical or clerical skills.*

May measure perceptual speed and accuracy, attention to detail, the capacity to visualize and manipulate objects in space, principles of mechanical operation, ability to operate computers.

- Motor Skills

Motor skills tests: *tests to measure abilities involving muscle coordination, finger dexterity and eye-hand coordination.*

Many jobs in industry and the military require abilities.

These tests may simulate assembly-line conditions.