

QP CODE 69197

Q 1. a. Define intelligence. Three theories of intelligence.

Definition

Spearman's g factor

Gardner's multiple intelligences

Sternberg's triarchic theory

Cattell-Horn-Carroll (CHC) theory

Neuroscience theory

PASS model of intelligence

(student can write any three)

a. Problem solving and decision-making strategies

Trial & error

Algorithms

Heuristics (Representativeness heuristic, availability heuristic)

Insight

b. Elements and structure of language

Grammar

Phonemes

Morphemes

Syntax

Semantics

Pragmatics

Q 2.a. Define motivation? Identify the key elements of the arousal and incentive approaches to motivation.

Definition of motivation

Arousal theory

Yerkes-Dodson law

Arousal-Performance graph

Sensation seeking

Incentive approach

What is incentive approach

External stimuli

Importance of Internal need

b. James-Lange, Cannon-Bard and facial feedback theories of emotion.

James – Lange theory of emotion

Cannon – Bard theory of emotion

Facial feedback hypothesis

c. Physical and social factors that influence hunger

Physical components of hunger

Hormonal influence

Role of the hypothalamus

Weight set point & basal metabolic rate

Social components of hunger

Role of conditioning

Cultural factors

Q.3.a. How the mind and personality are structured, according to Freud

Structure of the mind

Freud's divisions of the personality

Conscious

Preconscious

Unconscious

Pleasure principle

Id

ego

Superego

Brief description of defense mechanisms

b. Bandura and Carl Rogers perspectives on personality development

Reciprocal determinism

Diagram of reciprocal determinism

Self-efficacy

Humanistic perspective

Self-concept

Real and ideal self

Conditional and unconditional positive regard

Diagram of real and ideal selves

c. 5-factor model of personality. Limitations of trait view of personality.

Big five

Openness

Conscientiousness

Extraversion

Agreeableness

Neuroticism

Limitations

Q.4.a. Calculate the standard deviation and the range for the following set of scores and Z

Score for '38'

33, 42, 38, 42, 37, 29, 30, 28.

R = 42 - 28 = 14

X	X - M	(X-M) ²
33	33-34.87 = - 1.87	3.49
42	42-34.87= 7.13	50.83
38	38-34.87= 3.13	9.79
42	42-34.87= 7.13	50.83
37	37-34.87= 2.13	4.53
29	29-34.87= - 5.88	34.57
30	30-34.87= - 4.87	23.71
28	28-34.87= - 6.87	47.19
M=∑ X/N= 279/8=34.87		∑(X-M) ² = 224.94

$$\sigma = \sqrt{\frac{\sum (X-M)^2}{N}}$$

N

$$= \sqrt{\frac{224.94}{8}}$$

8

$$= \sqrt{28.117}$$

$$= \mathbf{5.30}$$

$$\mathbf{Z = X-M / \sigma}$$

$$= 38 - 34.87 / 5.30$$

$$= 3.13 / 5.30$$

$$= \mathbf{.59}$$

b. (i) Calculate mean, median and mode for the following set of scores

70, 72, 68, 65, 65, 82, 60, 63, 65, 73, 84, 67, 65, 72

$$M = 971 / 14$$

$$= \mathbf{69.357}$$

Median

60,63, 65,65,65,65,67,68,70,72,72,73,82,84

$67+68/2$

$135/2$

67.50

Mode = 65

(ii) Define the terms 'mean', 'median' and 'mode'

Definition of mean, median & mode

C. With an example, explain the usefulness of frequency distributions

Example of number of glasses of water that people drink per day (or any other example)

Diagram

usefulness

Q.5. Attempt any two of the following:

a. Explain (i) reliability, (ii) validity and (iii) standardization of tests

Reliability definition

Validity definition

Example

Standardization of tests: define the term

Consistent & standard method of test administration

Random selection of standardization group

Representative sample

b. Discuss instincts and evolutionary, and drive-reduction theory of motivation.

Instincts

James, McDougall – evolutionary theorists

Instincts proposed by McDougall

Problem with instinct approach

What it accomplished

C. Write a note on projective tests of personality. Discuss advantages and disadvantages of using projective personality tests.

What is projective test

Rorschach's Inkblot test

TAT

Problems with projective tests

Advantages & disadvantages

d.(i) Prepare a frequency distribution table from the following set of scores

35, 40, 34, 36, 42, 43, 32, 30, 38, 36,
41, 40, 34, 32, 31, 37, 39, 37, 37, 44,
39, 37, 30, 33, 43, 42, 39, 43, 37, 43

Range = $44 - 30 = 14$

Class Interval	Tally marks	Frequency
42-44		7
39-41		6
36-38		8
33-35		4
30-32		5
		N = 30

(ii) With an example, explain the term 'correlation coefficient'.

Definition of correlation

Negative, positive & zero correlation

Example