

QP code 69200

1. Attempt any two from the following: (20)

- a. Explain the functions of concepts and prototypes in thinking.

Concepts are ideas schemas or even **scripts** represent a class or category of objects, events, or activities. concepts allows us to communicate with each other, they allow the identification of new objects and events that may fit the concept. contain the important features of the objects or events types of concepts

prototype an example of a concept that closely matches the defining characteristics of the concept

prototypes develop according to the culture and exposure a person has to objects in that category.

How do prototypes affect thinking

- b. Explain the theories of intelligence given by Gardener and Sternberg.

Gardener multiple intelligence theory- all concepts

Strenberg triarchic theory-all concepts

- c. Explain the barriers to problem solving.

Functional fixedness with examples

Mental set with examples

Confirmation Bias with examples

2. Attempt any two from the following:

- a. Explain the hormonal influences and role of hypothalamus in hunger motivation.

Insulin and glucagon

Relationship between blood sugar and insulin

Role of leptin

role of the hypothalamus in controlling many kinds of motivational stimuli, including hunger

role of levels of glucose and insulin influencing different areas of hypothalamus

ventromedial hypothalamus (VMH)

lateral hypothalamus (LH)

- b. Explain in detail the arousal theory of motivation.

Concept of optimal arousal theory of motivation
Task performance and anxiety
Yerkes-Dodson curve
Maintaining optimal arousal
Sensation seeker

- c. Discuss James-Lange theory of emotion and the facial feedback hypothesis.

William James (1884, 1890, 1894), and physiologist and psychologist in Denmark, Carl Lange (1885) theory in which a physiological reaction leads to the labeling of an emotion- arousal of the “fight-or-flight, sympathetic nervous system (wanting to run), produces bodily sensations such as increased heart rate, dry mouth, and rapid breathing. physical arousal led to the labeling of the emotion (fear). - Examples

Facial-feedback hypothesis: facial expressions evolved as a way of communicating intentions, such as threat or fear, and that these expressions are universal within a species rather than specific to a culture. (Charles Darwin)
theory of emotion that assumes that facial expressions provide feedback to the brain concerning the emotion being expressed, which in turn not only intensifies the emotion but also actually *causes* the emotion (Buck, 1980; Ekman, 1980; Ekman & Friesen, 1978; Keillor et al., 2002).
some doubt on the validity of this hypothesis-explanation

3. Attempt any two of the following: (20)

- a. Explain the psychosexual stages of development given by Sigmund Freud.

Personality development proposed by Freud and tied to the sexual development of the child.
Explanation of Oral, anal, phallic, latent and genital stages
Fixation at stages : disorder in which the person does not fully resolve the conflict in a particular psychosexual stage, resulting in personality traits and behavior associated with that earlier stage

- b. Explain in brief Big Five theory of personality

- c. Explain the concept of self-control and locus of control

4. Attempt any two of the following: (20)

Please note use of simple calculator is permitted

- a. (i) Calculate the mean, median and mode for the following scores. (07 marks)

40	43	42	49	51	48	50	46	47	42	41	39	52	45
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39
40
41
42
42
43
45
46
47
48
49
50
51
52
635

45.35714

Median : $45+46=91/2=45.5$

Mode=42

(ii) Write a note on measures of central tendency? (03 marks)

b. (i) Prepare a frequency distribution table from the following set of scores. (06 marks)

22,20,21,22,22,18,17,18,19,20,

20,18,17,18,19,20,22,21,21,20

21,18,18,17,18,19,22,22,20,18

Class Interval	Tally marks	Frequency
17		3
18		8
19		3
20		6
21		4
22		6

		N = 30
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(ii) Explain the difference between histogram and frequency polygon with the help of a diagram. (04 marks)

Correct diagram using above data or new data

c. With examples explain types of correlation and concept of correlation coefficient. (10)

Concept of correlation being different from causation

Positive negative and zero correlation with examples

Strength of relationship give by coefficient

Low, moderate and high correlation

5. Attempt any two of the following: (20)

a. Explain in detail the concept of emotional intelligence.

Definition of emotional intelligence

Book smarts vs common sense, success in real world

Peter-Salovey, Daniel Goleman

Research by Mayer

b. Elaborate on self-determination theory of motivation.

Definition

Explain the 3 inborn universal needs of autonomy, competence and relatedness

Role of environment in fulfilling these needs

c. Write a detailed note on projective techniques

Meaning of projective tests

personality assessment tool

Ink-blot tests

TAT

Please note use of simple calculator is permitted

- d. Calculate standard deviation, range for the following scores and z score for 14
20, 18, 22, 14, 24, 26, 28, 44

Q5.d. calculation and answer

R=44- 14=30

X	X - M	(X-M) ²
20	-4.5	20.25
18	-6.5	42.25
22	-2.5	6.25
14	-10.5	110.25
24	-0.5	0.25
26	1.5	2.25
28	3.5	12.25
44	19.5	380.25
$M = \sum X/N = 196/8 = 24.5$		$\sum (X-M)^2 = 574$

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

N

$$= \sqrt{\frac{574}{8}}$$

8

$$= \sqrt{71.75}$$

$$= \mathbf{8.47}$$

$$Z = \frac{X-M}{\sigma}$$

$$= \frac{14 - 24.5}{8.47}$$

$$= -1.24$$

$$= \mathbf{-1.24}$$