

2010

M.A. Part-II Examination

PHILOSOPHY

PAPER—VII

Full Marks : 100

Time : 4 Hours

The figures in the right-hand margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

Write the answer to questions of each Group in separate books.

Answer any six questions taking any three from each group.

[ Advaita Vedanta ]

Group—A

1. Discuss the utility of *Adhyāsa - Bhāṣya* composed by Saṅkara. 16
2. How does Saṅkara establish that the *adhyāsa* of *anātmā* on *ātmā* is possible and Brahman is an object of enquiry? Explain after the *Bhāmati* of Vācaspati Miśra. 16

3. (a) Who are the upholders of the theory of *ātmakhyāti*? 2  
 (b) Explain, after the *Bhāmatī*, the theory of *ātmakhyāti*. 6  
 (c) Show how the author of the *Bhāmatī* reacts of the theory. 6
4. Discuss the exact meaning of the word 'atha' in the Brhmasūtra, *athāto brahmajijñāsā* after the Bhaṣya of Śaṅkara. 16
5. Explain, after Śaṅkar, the Brahmasutra *janmādyasya yataḥ*. Is it Brahman's *tatastha lakṣaṇa* or a *svarupa lakṣaṇa* or both? Discuss. 10+6
6. Answer, in short, any four of the following : 4×4
- (i) What is *Sārirakabhāṣya*?
  - (ii) What is *sādhanacatuṣṭaya*?
  - (iii) What is *adhyāsa*?
  - (iv) Distinguish between *viṣaya* and *viṣayi*?
  - (v) What is *catuḥsutri*?
  - (vi) What is *akhyati*?
  - (vii) What is meant by the word 'ataḥ' in the Brhmasūtra, *athāto brahmajijñāsā*?
  - (viii) What is *kevalādvaitavedānta*?

General Impression — 2

### Group—B

1. Explain and examine the Advaita definition of *pramā* as depicted in the Vedānta - Paribhāṣā. 16
2. (a) Explain the Advaita concept of *antaḥkaraṇa* (mind), after the Vedānta - Paribhāṣā.  
(b) Is *antaḥkaraṇa* (mind) a sense-organ? Answer according to Dharmarāja. 6+10
3. (a) What is *lakṣaṇa*?  
(b) Distinguish between *svarūpa lakṣaṇa* and *tatastha lakṣaṇa*.  
(c) Explain *svarūpa lakṣaṇa* and *tatastha lakṣaṇa* of Brahman, after Vedānta - Paribhāṣā. 2+4+10
4. Explain Dharmarāja's view on the criterion of *jñānagata pratyakṣatva* (Perceptuality of knowledge). 16
5. Discuss elaborately the process of *pañcīkaraṇa* for the creation of *bhūtapadārthas*, after Vedānta - Paribhāṣā. 16
6. Explain four types of *pralaya* as depicted in the Vedānta - Paribhāṣā. 4×2

General Impression — 2

**[ Advanced Logic ]**

**Group—A**

1. (a) What is the meaning of completeness of an axiomatic system ?  
 (b) In what sense is PM System Complete?      4+12
2. Derive the following in the PM from its base (*any two*):
  - (i)  $p \vee \sim p$
  - (ii)  $\sim\sim p \supset p$
  - (iii)  $(\sim q \supset \sim p) \supset (p \supset q)$
  - (iv)  $(p \vee (q \vee r)) \supset ((p \vee q) \vee r)$       8×2
3. Prove the following theorems of PM.
  - (i)  $(\sim q \supset \sim p) \supset (p \supset p)$
  - (ii)  $[(p \vee q) \vee r] \supset [p \vee (q \vee r)]$       8×2
4. (a) State and explain the basic transformation rules of the system T :  
 (b) Prove the following in T.
  - (i)  $(p = q) \supset (Lp \equiv Lq)$
  - (ii)  $(Lp \cdot Lq) \supset (p = q).$       6+5+5
5. Prove the following in system T.
  - (i)  $P \supset MP$
  - (ii)  $M(p \vee q) \equiv (Mp \vee Mq)$
  - (iii)  $L(p \cdot q) \equiv (Lp \cdot Lq)$
  - (iv)  $\sim M(p \vee q) \equiv (\sim Mp \cdot \sim Mq)$       8×2

6. (a) What are iterated Modalities ?  
 (b) What are reduction laws T? State the four important reduction laws.  
 (c) Do we require the addition of these four reduction laws as axioms in order to have extension of T? Give reasons for your answer.  
 (d) Prove the following in  $S_4$  :
- LMP  $\supset$  LMLMP 2+(2+2)+6+4

*General Impression — 2*

**Group—B**

1. (a) Is there any distinction between  $\{1, 2\}$ ,  $\{2, 1\}$  and, between  $\langle 1, 2 \rangle$ ,  $\langle 2, 1 \rangle$  ? 2
- (b) Show that  $\langle 1, 2, 2 \rangle \neq \langle 1, 2 \rangle$  2
- (c) Determine the domain, codomain and field of the relation of being mother in the set of all people. 2
- (d) Let  $A = \{3, 5, 8\}$  and  $R_2 = \{\langle 3, 3 \rangle, \langle 5, 5 \rangle, \langle 8, 8 \rangle\}$  be a binary relation in A. Characterise R with respect to various properties of binary relation. 4
- (e) Give example of each of the following relations and explain that the example satisfies the required conditions :
- (i) A binary relation which is reflexive, but neither symmetric nor transitive.
- (ii) a binary relation which is neither transitive nor intransitive, but symmetric. 3+3

2. (a) Classify the following relations according to the properties then do or do not have (e.g. reflexive, symmetric, not transitive etc.).

(i) The relation of being less than ( $<$ ) in the set of all numbers.

(ii) The relation of having the same height in the set of all persons.

(iii) The relation of being a brother in the set of all persons.

(iv) The relation of being an uncle in the set of all persons. 3×4

(b) Give an example of a family relationship which is both transitive and intransitive. 4

3. (a) Let,  $A = \{\langle 6, 5 \rangle, \langle 3, 1 \rangle\}$

$B = \{\langle 6, 8 \rangle, \langle 3, 5 \rangle\}$

Find :  $\bar{B}/A$ . 3

(b) Let  $M = \{\langle 3, 4 \rangle, \langle 4, 3 \rangle\}$

What is the universal relation over the field of  $M$ ? 3

(c)  $XY$  means  $X$  is brother of  $Y$ .

$XS$  means  $X$  is sister of  $Y$ .

$XF$  means  $X$  is father of  $Y$ .

$XM$  means  $X$  is mother of  $Y$ .

Find :

(i)  $x [(B \cup S) / F] y$

(ii)  $x (F \cap M) y$  2+2

- (d) Which of the following relations are functions? Give reasons for your answer.
- (i) The relation  $R_1$  where  

$$R_1 = \{ \langle 3, 4 \rangle, \langle 3, 5 \rangle, \langle \text{Jim}, \text{Tom} \rangle \}$$
  - (ii) The relation of being a wife.
  - (iii) The relation of being a grandfather. 2×3
4. (a) What is a well formed formula? 2
- (b) What is a formal language? 2
- (c) What is model theory? 2
- (d) What is meant by deductive apparatus? 2
- (e) State whether the following statements are true or false. Justify your answer.
- (i) Symaetic has a slightly wider sense than proof theoretic. 3+3
  - (ii) Only proof theory belongs to meta theory. 2
- (f) What do we mean by proof in a formal system? 2
5. (a) Define any three of the following :
- (i) Decidable sets.
  - (ii) 1-1 correspondence.
  - (iii) Greater cardinal number.
  - (iv) Countable set. 2×3
- (b) What is an effective method? 4

- (c) (i) Is 'ask an unicorn' an effective method for solving a problem ?
- (ii) Is 'asks a wise man who always tells the truth' an effective method for solving a problem ?
- (iii) 'No solution has been found to this problem, so there is no effective method for solving it'. Is this a valid argument ? 2×3
6. (a) What does A.N. Prior mean by an analytically valid inference ? 4
- (b) What is the meaning of the logical connective 'and' ? 3
- (c) What is meant by the conjunction 'tonk' ? 3
- (d) Make an analytically valid inference by introducing the conjunction 'tonk'.
- (e) Is the inference 'Rose is red and sky is blue, therefore, rose is red' an analytically valid one ? 3

*General Impression — 2*

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