## K16U 0419



- 25. Define constructive dilemma and present its symbolic form.
- 26. Distinguish between material and logical equivalence.
- 27. State the two theorems introduced by De Morgan.
- 28. Describe the scope of internet as a physical infrastructure: (Weightage 4×2= 8)

## PART - D

Answer any two questions. Each question carries a weightage of four. Answer should not exceed 200 words.

- Define truth table and describe the truth tables for disjunction, equivalence and implication.
- 30. a) Construct the formal proof of validity for the following:

$$P \supset Q$$

$$(P \cdot Q) \supset R / :: P \supset R$$

- b) Present the symbolic form of the elementary valid argument forms used to prove the validity of the argument form given in (a).
- 31. Describe the classification of statements into tautologous, contradictory and contingent with the help of their truth tables.
- 32. Discuss the scope of internet as a knowledge repository with special reference to educational websites. (Weightage 2×4= 8)



K16U 0419

Reg. No	). :	
Name :		

IV Semester B.A. Degree (CCSS – Supple./Imp.)

Examination, May 2016

Core Course in Philosophy

4B06 PHIL: SYMBOLIC LOGIC AND INFORMATICS

(2013 Admission)

Time: 3 Hours

Max. Weightage: 24

## PART-A

Answer all questions. A bunch of 4	questions carries a weightage of one.
'Informatik' is originally a/an	*
a) English	b) Spanish
c) French	d) German
2. In symbolic logic,	do not change their value.
a) variables	b) constants
c) both a) and b)	d) neither a) nor b)
3. In 'All S is P', 'S' and 'P' are	
a) variables	b) constants
c) propositions	d) arguments
<ol> <li>'To deny a proposition is to affi function.</li> </ol>	rm its contradictory'. This refers to truth
a) conjunctive	b) disjunctive
c) negative	d) all these
5. A disjunctive proposition is	when at least one of the disjuncts is true.
a) true	b) false
c) negative	d) none of these

P.T.O.

6.	The truth-functional connective f	or inclusive disjunction is	called a
	a) curl	b) tilde	
	c) dot (cm/relqqu2 - 283		
7.	If 'p' and 'q' are false, 'p ≡ q' is		
	а) true задарам диа о	b) false	
	c) both a) and b) (mple	d) neither a) nor b)	
8.	has more than one m	eaning.	
	a) Proposition	b) Negation	
	c) Implication	d) none of these	
9.	A statement form that has only f	alse substitution instances	s is called a
	a) contingent statement form		
	c) tautology	d) none of these	
10.	'p • q, .: p' is the symbolic repre	sentation of	
		b) Addition	daner-lico
	c) Modus Ponens	d) Simplification	
11.	is a statement for	orm in which all substitution	n instances must be
	true. (dnon/sner	tlien. /b	
	a) Contradiction	b) Tautology	
	c) Contingent statement	d) All these	
12.	From 'A $\supset$ B', we can conclude	by Modus Pone	
	a) ~ B	0, 0	
	c) A · B	d) none of these	
13.	is a term associate	d with digital revolution.	
		b) Infotainment	
	c) Argument	d) None of these	
14.	Informatics includes the study of	communication in	as well as devices.
	a) organisms	b) space	
	c) information	d) none of these	

15. IIIIOIIIIalioi 18 lacis.		
a) observed	b) used	
c) conceived	d) organized	
16. Informatics has the basic theme	of	
a) digitalization	b) computer network	28. Describe the scope
c) human-computer interaction	d) internet	(Weightage 4×1=4)
	PART-B	Answer any two question
Answer any four questions. Each que not exceed 20 words.	estion carries a weightage	of <b>one</b> . Answer should
17. Present the truth table for conjun	action.	
18. Present the symbolic representa	tion of Modus Tollens.	
<ol> <li>If the component propositions a true or false X ⊃ (Y ⊃ Z).</li> </ol>		hether the following is
20. State the meaning and symbolic	representation of Double	Negation.
21. Write a short note on ARPANET	s etopoletists to not sold	
22. Define 'Cyberspace'.		(Weightage 4×1= 4)
-both egothble(k)	PART-C	
Answer any four questions. Each que not exceed 100 words.	estion carries a weightage	of <b>two</b> . Answer should

- 23. Define compound statement and exemplify its symbolic form.
- 24. symbolize the following and find out its truth-value by truth table method according to the truth value given in brackets:
  - a) Price increase is a curse (T) and food shortage is a curse (F).
  - b) If the weather is pleasant (F) we shall visit Jovan (F).