

4. As far as the picture-word interference paradigm is concerned, it is observed that semantic relationship between the picture and a word \_\_\_\_\_ the participants naming response whereas the phonological relationship between the picture and a word \_\_\_\_\_ the participants naming response.
- Slows down, speeds up
  - Speeds up, slows down
  - Speeds up, speeds up
  - Slows down, slows down
5. \_\_\_\_\_ bilingualism is mainly governed by \_\_\_\_\_ factors that spans over a large number of individuals within a particular geographical region.
- Individual, Motivational
  - Societal, Demographic
  - Societal, Demographic
  - Societal, Motivational
6. Infants from \_\_\_\_\_ months of age experience a decline in the perception of foreign language consonants and an increase in native language consonant perception.
- 4 months
  - 11 months
  - 14 months
  - 24 months
7. The flavor of bilingualism that is observed with respect to Spanish in the United States of America is referred to as:
- Adjoining
  - Non-Adjoining
  - Cohesive
  - Non-Cohesive
8. \_\_\_\_\_ measurements are usually thought give the best estimate of a bilinguals' proficiency in their known languages for purposes of selection and categorization, both for research and screening.
- Subjective
  - Objective
  - Introspective
  - None of the above
9. According to Grosjean (1989), *language mode theory* bilinguals are able to flexibly adapt their linguistic performance depending upon the communicative repertoire of their audience and the context. This statement is:
- True
  - False
10. According to the model of picture naming proposed by Kroll et al., (2005), \_\_\_\_\_ is language non-selective and \_\_\_\_\_ is language selective.
- Phonological activation, lemma selection
  - Lemma selection, phonological activation
  - Conceptual selection, articulation
  - None of the above

4. As far as the picture-word interference paradigm is concerned, it is observed that semantic relationship between the picture and a word \_\_\_\_\_ the participants naming response whereas the phonological relationship between the picture and a word \_\_\_\_\_ the participants naming response.
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- a. Phonological activation, lemma selection
  - b. Lemma selection, phonological activation
  - c. Conceptual selection, articulation
  - d. None of the above

18. According to Costa & Santesteban (2004), balanced bilinguals adopt a \_\_\_\_\_ mechanism to manage the use of their two languages.
- a. Reactive inhibition
  - b. Language selective selection
  - c. Language non-selective activation
  - d. None of the above
19. According to the results of Mohnsara & Kuhlari (1971), the input switches of language subtests as observed under their language switching experiments operated under \_\_\_\_\_.
- a. Automatic control
  - b. Voluntary control
  - c. Independently
  - d. Different circumstances, each time
20. Peal & Lambert (1962) investigated \_\_\_\_\_ bilinguals and demonstrated that there was \_\_\_\_\_ cognitive functioning in these children as opposed to children exposed only to a single language.
- a. Unbalanced; improved
  - b. Balanced; improved
  - c. Unbalanced; deteriorated
  - d. Balanced; deteriorated
21. Self-ratings of language proficiency across the different skills for bilinguals have generally been found to be correct, in recent research, and correlate well with the experimental findings. This statement is:
- a. True
  - b. False
22. Kamala & Amelia were discovered as feral children, in the forests of India, at the ages of 3-years and 4-years respectively. The observed patterns of language acquisition later were:
- a. Kamala could not, Amelia could acquire language.
  - b. Amelia could not, Kamala could acquire language.
  - c. Both could not acquire language.
  - d. Both could acquire language very well.
23. \_\_\_\_\_ are words that have similar meaning and form across more than a single language.
- a. Homophone
  - b. Homographs
  - c. Cognates
  - d. Translational equivalents
24. Which of the following is a cognitive variable that is known to possibly moderate the nature of bilingualism?
- a. Age
  - b. Gender
  - c. Memory
  - d. Attitude

# KEY - B

Name:

Roll Number:

S.No.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.
	A	D	B	A	C	B	D	B	A	B	D	D	B	B	B
	16.	17.	18.	19.	20.	21.	22.	23.	24.	25.	26.	27.	28.	29.	30.
	B	A	B	A	B	B	C	C	C	B	C	C	A	B	A
	31.	32.	33.	34.	35.	36.	37.	38.	39.	40.	41.	42.	43.	44.	45.
	B	C	C	B	C	B	C	B	A	B	B	D	B	B	A
	46.	47.	48.	49.	50.	51.	52.	53.	54.	55.	56.	57.	58.	59.	60.
	B	D	B	D	B	A	C	B	A	D	D	B	B	B	A

## Cognitive Science of Bilingualism and Multilingualism (CGS622)

End-Semester Examination

Summer Semester 2024

Department of Cognitive Science

Indian Institute of Technology Kanpur

Kanpur - 208016.

Set - B

Marks: 60

Time: 3 hrs

Date: 15/7/24

Instructions: Each question has ONLY ONE correct answer (the one deemed correct by the  
Please is +1 mark for each correct answer and -0.5 for each incorrect answer. Please  
made above, along with your Name & Roll Number.

15

$$C = 30$$

$$\frac{I}{4} = 30 = 15$$

$$4 = 0$$

Name: Tyanshu Dholeq

Roll Number: 220481

S.No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Ans.																															
1	100	200	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
2	100	200	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
3	100	200	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
4	100	200	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
5	100	200	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
6	100	200	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
7	100	200	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
8	100	200	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
9	100	200	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
10	100	200	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
11	100	200	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
12	100	200	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
13	100	200	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
14	100	200	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
15	100	200	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
16	100	200	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
17	100	200	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
18	100	200	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
19	100	200	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
20	100	200	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
21	100	200	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
22	100	200	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
23	100	200	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
24	100	200	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
25	100	200	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
26	100	200	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
27	100	200	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
28	100	200	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
29	100	200	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
30	100	200	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

**Cognitive Science of Bilingualism and Multilingualism (CGS622)**

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Kanpur – 208016

Set – B

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Marks: 60

**Instructions:** Each question has ONLY ONE correct answer (the one deemed correct by the instructor). There is +1 mark for each correct answer and -0.5 for each incorrect answer. Please indicate your responses in the box made above, along with your Name & Roll Number. Any responses not marked in the boxes will not be corrected.

- Which of the following components of Green (1998)'s inhibitory control model is supposed to operate at a non-linguistic/pre-verbal level?
  - Conceptualizer
  - Lexico-semantic system
  - Task Schema
  - Supervisory Attentional System
- An interesting finding reported by Meuter & Alpert (1999) in their language switching study was that switching cost associated with switching two participants' dominant languages was more associated with switching into their non-dominant language. Where?
  - Equal
  - Initial
  - Symmetrical
  - Asymmetrical
- If the system of language control is manifested at specific levels of representation and through individual lexical items, the direction of control can be deemed to be:
  - Proactive control
  - Reactive control
  - Lexicalized control
  - Lexicalized control

om is concerned, it is observed that  
between the picture and a word  
has over a large

11. According to Gerninger & Benavillan's Bilingual Activation Verification model, there exists shared mental lexicons for both of a bilingual's two languages. This statement is:  
a. True  
b. False
12. \_\_\_\_\_ is a phenomenon that explains the use of Latin & English in parts of Europe and Sanskrit & Hindi in parts of India.  
a. Territorial bilingualism  
b. Diglossia  
c. Colective bilingualism  
d. Unique bilingualism
13. Infants under \_\_\_\_\_ months of age are sensitive to phonemic contrasts of not only their native language but also for the phonemic contrasts that occur in other languages as well.  
a. 1 month  
b. 7 months  
c. 14 months  
d. 24 months
14. Ravi has lived all his life in his village near Kampur, Uttar Pradesh. While he has not learned or uses a second language, he has been exposed to English through advertisements or billboards (written in Devanagari script). Can Ravi be classified as a bilingual individual?  
a. Yes  
b. No  
c. Maybe  
d. Not enough data
15. According to the *Independent network model*, one can say that:  
a. Lexicons are a necessary level of representation in language  
b. Lexicons are not a necessary level of representation in language  
c. Lexicons contain both semantic and syntactic aspects of particular concepts  
d. Lexicons contain only semantic aspects of particular concepts
16. The \_\_\_\_\_ classification of languages is based on the similarity of the structural features of languages.  
a. Genetic  
b. Typological  
c. Areal  
d. Design
17. According to models of speech production as observed by Costa et al., (1999), activation is \_\_\_\_\_ whereas selection is \_\_\_\_\_.  
a. Language non-selective, Language selective  
b. Language non-selective, Language non-selective  
c. Both are language non-selective  
d. Language selective, Language non-selective



45. Bates (2010)' research provides evidence for the fact that the linguistic and intellectual repertoires of bilingual may lead to \_\_\_\_\_ onset of Alzheimer's disease.

- a. Delayed
- b. Hastened
- c. Avoided
- d. Aggravated

46. Saffran (1996) demonstrated that a mechanism of \_\_\_\_\_ was employed by infants of recognize individual words from a continuous stream of speech.

- a. Probabilistic learning
- b. Statistical learning
- c. Observational learning
- d. Genetically guided learning

47. The system of \_\_\_\_\_ control refers to the \_\_\_\_\_ of the target language and the linguistic system.

- a. Reactive, pre-activation, suppression
- b. Proactive, suppression, pre-activation
- c. Reactive, suppression, pre-activation
- d. Proactive, pre-activation, suppression

48. A \_\_\_\_\_ bilingual is an individual who would access a given concept, through its translation from one language to the other.

- a. Coordinative
- b. Subordinative
- c. Compound
- d. Balanced

49. The figure below represents the \_\_\_\_\_ model of bilingualism, proposed by Koell & Stewart (1994).

- a. Word Association Model
- b. Concept Mediation Model
- c. Language Modes Model
- d. Revised Hierarchical Model



50. The SOPHIA model of visual word recognition in bilingual falls in the category of a:

- a. Continuous model
- b. Intersecting model
- c. Discrete feed-forward model
- d. None of the above

25. According to Grosjean (1989)'s *language mode theory*, the linguistic system exercises \_\_\_\_\_ over the inappropriate language for a given context which operates over the \_\_\_\_\_ linguistic system.

- a. Reactive control, specific levels of
- b. Proactive control, overall
- c. Proactive control, specific levels of
- d. Reactive control, overall

26. Which of the following models of visual word recognition incorporates a task-decision system that is sensitive to extra-linguistic influences that moderate a bilingual's word recognition performance?

- a. BIA model
- b. SOPHIA model
- c. BIA+ model
- d. Revised Hierarchical model

27. Individuals typically demonstrate a tendency to \_\_\_\_\_ their proficiency in the languages they know, when asked about the same in self-rated questionnaires.

- a. Correctly Rate
- b. Underestimate
- c. Overestimate
- d. Deny

28. Colomé (2001) provided evidence for the \_\_\_\_\_ phonological encoding in bilinguals using a phoneme-monitoring task.

- a. Language non-selective
- b. Language selective
- c. Depleted
- d. None of the above

29. According to the \_\_\_\_\_, humans have a superior ability for acquiring languages at birth, which rapidly declines with age & brain development.

- a. Exercise hypothesis
- b. Maturationist state hypothesis
- c. Statistical learning hypothesis
- d. Inactively guided learning hypothesis

30. Based on the studies such as Bosch & Sebastián Gallés (1997), infants at \_\_\_\_\_ months of age can discriminate rhythmically dissimilar languages (e.g., French and English), whereas infants at \_\_\_\_\_ months of age distinguish even between rhythmically similar languages (e.g., English, Dutch).

- a. 2, 4
- b. 7, 11
- c. 8, 16
- d. 24, 36



51. According to the language *universal approach* all languages share the same design features. This statement is:  
a. ✓ True  
b. False

52. The critical period hypothesis (as in De Keyser, 2000) predicts an age function with \_\_\_\_\_ in the second language acquisition pattern of individual.

- a. Continuous growth
- b. ✓ One discontinuity
- c. ✓ Two discontinuities
- d. Tapered growth

53. According to David Green (1998)'s inhibitory control model, bilinguals utilize \_\_\_\_\_ to manage the \_\_\_\_\_ language.

- a. ✓ Proactive inhibition, contextually appropriate
- b. ✓ Reactive inhibition, contextually inappropriate
- c. ✓ Reactive facilitation, contextually appropriate
- d. ✓ Proactive facilitation, contextually appropriate

54. According to De Bot & Schruder (1993), the decision of which language to speak in is made at the level of:

- a. Formulation
- b. Articulation
- c. Conceptualization
- d. ✓ Lexeme selection

55. As far as the picture-word interference paradigm is concerned, it is observed that the semantic relationship between the picture and the word manifests \_\_\_\_\_ in the timeline of responding whereas the phonological relationship between the picture and the word manifests \_\_\_\_\_ in the timeline of responding.

- a. ✓ Early, late
- b. ✓ Late, early
- c. Early, early
- d. Late, late

56. The flavor of bilingualism that is observed with respect to French, exhibited in Canada & Spain is referred to as:

- a. ✓ Unique
- b. Non-unique
- c. Adjuncting
- d. Non-adjuncting

57. According to Caramazza's (1997) model of speech production, a word's phonology is dependent upon its semantic and syntactic activation. This statement is:  
a. ✓ True  
b. False

58. According to the \_\_\_\_\_, individual differences in language learning abilities basically drive the differences in language acquisition, for instance in De Keyser (2000)' study.
- a. Critical period hypothesis
  - b. Fundamental difference hypothesis
  - c. Statistical learning hypothesis
  - d. None of the above
59. Grosjean (1997) conducted an interesting experiment with French-English bilinguals asking them to summarize stories in French for different kinds of audience, who varied in their levels of French proficiency. The key take-away from this experiment, as revealed in their results was:
- a. Bilinguals find it difficult to adapt to different types of audience
  - b. Bilinguals effortlessly adapt to different types of audience
  - c. Bilinguals cannot adapt to different types of audience
  - d. Bilinguals do not need to adapt to different types of audience
60. Johnson & Newport (1989)' study with Korean immigrants in the United States of America provided:
- a. Evidence in support of the critical period hypothesis
  - b. Evidence negating the critical period hypothesis
  - c. Inconclusive evidence either way
  - d. None of the above

38. Kohl et al., (2003) exposed 9- and 10-month old American infants to sessions from Mandarin-Chinese speakers and demonstrated that perception of non-native language contrasts could not be reversed once laid with age. This statement is:  
☒ True  
☐ False
39. One of the most important aspects of language acquisition is Infant Directed Speech which is crucial for children acquiring language at a normal pace and quality. This statement is:  
☒ True  
☐ False
40. According to the proposal by Paulose (1997), the lemma representations of each individual lexical item specifies its membership using a \_\_\_\_\_.  
☒ Language node  
☐ Language tag  
☐ Language script  
☐ Language grammar
41. Lambdifer et al., (2008) study provided evidence for language selective grammatical encoding for a bilingual's two known languages. This statement is:  
☒ True  
☐ False
42. As per the picture-word interference study conducted by Hermann et al., (1998) the data agreed with the \_\_\_\_\_ model of speech production.  
☐ The discrete two stage models  
☐ The unidirectional cascade models  
☒ The interactive activation models  
☐ None of the above
43. As per the language switching study conducted by McWhannan et al., (1968), wherein participants had predictable and unpredictable language switches, the pattern of switch costs observed indicated that the output switches opened under \_\_\_\_\_.  
☐ Automatic control  
☒ Voluntary control  
☐ Independently  
☐ Different circumstances, each time
44. According to Paul & Lambert (1962), bilingualism was found to be detrimental for the cognitive development of children, as compared to their monolingual counterparts. This statement is:  
☒ True  
☐ False

31. David Green (1998)'s inhibitory control model implies that language schemes that are utilized to alter the activation levels of the target & non-target language are:
- Language specific (applying only to linguistic scenarios)
  - Generic (applying to all kinds of task-switching scenarios)
  - Flexible mental entities that function depending upon the circumstances
  - None of the above
32. If one is to look at the question of proficiency for bilinguals, they would find that it is a \_\_\_\_\_ construct:
- Unitary factor
  - Binary factor
  - Multi factor
  - Fluid
33. The case of which of these four children actually presented some (although weak) evidence in opposition of the critical period hypothesis:
- Karina
  - Victor
  - Genie
  - Oxana
34. In the SOPTA model of visual word recognition, there are both excitatory and inhibitory connections from a language node to all the word nodes of another language. This statement is:
- True
  - False
35. According to Lenneberg (1967) the critical period of language acquisition derives mainly from:
- Home language acquisition device
  - Plasticity of the infant brain
  - Lateralization of the brain
  - Genetics of the specific infants
36. Bilinguals need to constantly manage the \_\_\_\_\_ between their two fully developed linguistic systems; they use accomplish this task using a system of language \_\_\_\_\_
- Coordination, management
  - Intermingling, assimilation
  - Interweaving, facilitation
  - Interweaving, facilitation
37. In language-switching experiments, it has been observed that participants' reaction times to non-switch trials in a mixed block are higher than their reaction times to non-switch trials in the pure-language block. These costs are referred to as:
- Switching Costs
  - Non-switching Costs
  - Mixing Costs
  - Suppression Costs