A Impact of Various Embeddings

We perform an ablation study to identify the impact of various word embeddings used in RefNet. When character embedding is not used in RefNet, the performance on SQuAD sentence-level drops from 18.16 to 17.97 BLEU-4 score. Meanwhile, when positional embeddings are dropped the performance decreases to 17.87 BLEU-4 score.

B Reward-RefNet on Various Datasets

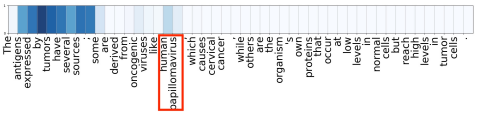
Table 1 shows the comparison between RefNet and Reward-RefNet on BLEU-4 score and answerability score when the respective scores are used as rewards in Reward-RefNet. We can infer from Table 1 that there is improvement in fluency and answerability across all the datasets.

Datasets	Model	BLEU-4 Reward Signal	Answerability Reward Signal
SQuAD (Passage Level)	RefNet	16.99	26.6
	Reward-RefNet	17.11	27.3
HOTPOT-QA	RefNet	21.17	28.7
	Reward-RefNet	21.32	29.2
DROP	RefNet	21.23	33.6
	Reward-RefNet	21.60	34.3

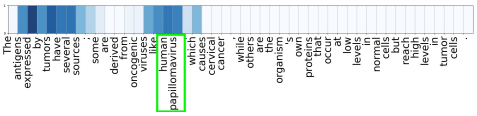
Table 1: Impact of Reward-RefNet on various datasets when fluency and answerability are used as reward signals.

C Visualization of Attention Weights

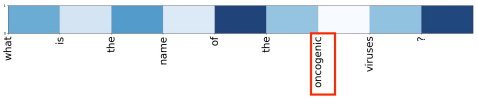
We plot the aggregated attention given to the passage and initial draft of the generation question across the various time-steps of the decoder in Figure 1. Although, both the questions are specific to the answer, $\mathbf{A_2}$ pays some attention to the context surrounding the answer, which leads to a complete question. Also, note that in $\mathbf{A_3}$, while attending on to initial draft "oncogenic" word is not paid attention to and thus the final draft revises over the initial draft by correcting it to generate a better question.



(a) $\mathbf{A_1}$ attention plot



(b) $\mathbf{A_2}$ attention plot



(c) $\mathbf{A_3}$ attention plot

Figure 1: Attention plots for a) $\mathbf{A_1}$, b) $\mathbf{A_2}$, c) $\mathbf{A_3}$ respectively
Initial Generated Question: "What is the name of the oncogenic virus?"
Refined Generated Question: "What is the name of the organism that causes cervical cancer?"
Passage: "The antigens expressed by tumors have several sources ; some are derived from oncogenic viruses like human papillomavirus , which causes cervical cancer , while others are the organisms own proteins that occur at low levels in normal cells but reach high levels in tumor cells."