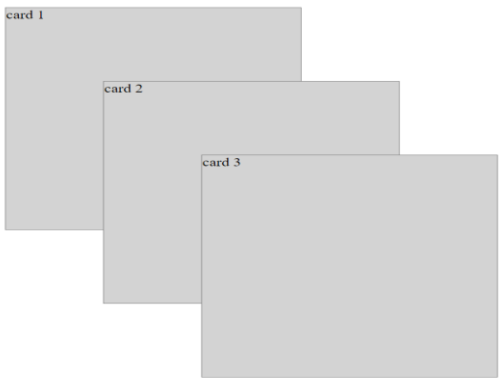
POKHARA UNIVERSITY

Level: Bachelor **Semester –** ... **Year: 2021**
Program: BE **Full Marks:** 70
Course: Web Technology **Pass Marks:** 31.5
Time: **2** hrs.

Candidates are required to answer in their own words as far as practicable. The figures in the margin indicate full marks.

Group - A: Attempt all questions (5*10=50)		
Q. N. 1	Whenever you type some URL in a browser's address bar and hit enter, a lot of activities occur behind the scenes including finding the correct server and obtaining required documents from it. Now explain all of the behind the scene activities in details.	10
	Or	
	In order to make an online presence or for just transferring any data there are certain predefined rules to follow. Explain any 5 such commonly used protocols that serves different purposes of their own.	10
Q. N. 2	Pokhara university is planning to launch an Online Discussion Forum for students as well as teachers. And you have been selected as one of the developers for the project. Your first task is to develop a web page for student registration. For registration, students are required to mandatorily provide their Full Name (First, Middle and Last), Roll number, Gender, Contact number, email address, College name, Faculty, Semester and Shift. There are optional data to be collected like Student's photo and address. Since there are limited number of colleges under PU, College names should be given in drop-down menu. Same is the case for Faculty and Semester. Since there are only two shifts make use of appropriate HTML tags. Provide necessary label for each field and also a title to the form. Initially you don't have to work on styling aspects but for maintaining indentation you should make use of tables.	10

Q. N. 3	For the above registration form, tabular design as not so impressive, so you should now write custom CSS code to make the registration form look outstanding. Make use of CSS box model as well as other styling properties namely font, alignment, text decoration, height, width etc. Also write HTML and CSS for a navigation bar with a horizontal form (on right side) to be used for Signing in a student, in the registration page.	10
Q. N. 4	For the registration form created in question 2, the next requirement is making sure all the fields get their intended values as well as the required items shouldn't be left blank. Now your next task is to write some client-side code to make sure all the fields are validated properly before sending the registration data for processing.	10
Q. N. 5	For the Online Discussion Forum mentioned in question 2, there is an admin dashboard panel also. There are certain features in admin section and one of them is displaying stored user details in card form stacked on top of one another as shown in figure. You need to write down prototype code to make an UI looking like this and additionally write JS code to add interactivity to the cards. Interactions include when the user clicks a card it should be displayed on top of other cards as well as admin should be able to move and place any of the cards anywhere within the viewport. 	10

Group - B: Problem-solving/case studies (1*20=20)		
Q. N. 6	As an experienced developer your next task includes creating a backend for the registration system mention in question 2. Create appropriate data storage end points utilizing PHP and MySQL as well as every piece of data should be checked for error before inserting into database tables. Any errors in data should be shown to registering student and on successful registration student should be redirected to a demo home page where student should be greeted with a welcome message and his own name. Write codes to implement these features.	20

Best of Luck!