Name: **Enrolment No:**	UPES UNIVERSITY WITH A PURPOSE

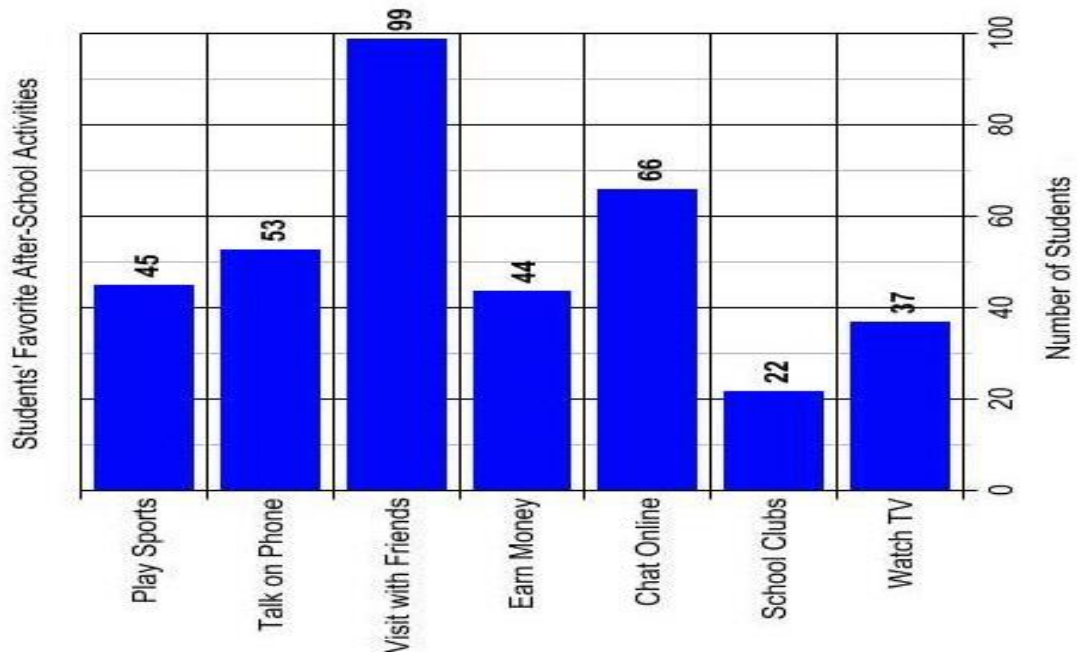
UNIVERSITY OF PETROLEUM & ENERGY STUDIES

End Semester Examination (Online) – July, 2020- Set-II

Program: BBA (AVO) **Semester : II**
Subject/Course: Business Statistics **Max. Marks: 100**
Course Code: DSQT1004 **Duration : 3 Hours**

IMPORTANT INSTRUCTIONS

1. *The student must write his/her name and enrolment no. in the space designated above.*
2. *The questions have to be answered in this MS Word document.*
3. *After attempting the questions in this document, the student has to upload this MS Word document on Blackboard.*
4. ***Attempt any five questions. Each question carries equal marks.***

		Marks	COs
Q.1	 See the graph provided above and Interpret it. (Min 100 Words) Using graph answer the following questions (a) Which activity has the highest percentage of participation? (b) List the categories from least to greatest participations? (c) Find the difference of the number of student participated for talk on phone and school clubs?	20	CO1

<table>
<tr><td></td><td>(d) How many students like to Watch TV?</td><td></td><td></td></tr>
<tr><td>Q.2</td><td>The shoe sizes of 8 soldiers selected in a team are 8, 6, 5, 3, 5, 3, 4, 5, 5.
(i) Comment on the symmetry of the data set.
(ii) Comment on the Skewness of the distribution of shoe sizes.
(iii) Comment on the range of the data set.
(iv) Which measure of central tendency will be best suited for the given data set.</td><td>20</td><td>CO2</td></tr>
<tr><td>Q.3</td><td>Which of the following statement is correct for an ideal measure of central tendency explain with proper reason.
(i) Should be based upon all the observations.
(ii) The value of measure should not to be zero.
(iii)Affected as little as possible by fluctuation of sampling.
(iv)Not be affected much by extreme values.</td><td>20</td><td>CO3</td></tr>
<tr><td>Q.4</td><td>Suppose you are conducting a survey to obtain the data regarding the Age and the Height of 20 students studying in BBA Aviation of UPES. If the same data is used to calculate the correlation coefficient between the age and height of the students. Then comment on the following points in brief.
(i) Collection of data (Discuss how will you collect the data.)
(ii) Tabulation (Discuss how will you arrange your data in tabular form.)
(iii) Analysis (Discuss which formula will be used to check the correlation coefficients.)
(iv) Interpretation (How will you conclude the result on the basis of correlation coefficients.)</td><td>20</td><td>CO4</td></tr>
<tr><td>Q.5</td><td>Give one real life example of a situation in which
(i) The mean is an appropriate measure of central tendency.
The mean is not an appropriate measure of central tendency but the
(ii) Mode is an appropriate measure of central tendency.
(iii) Median is an appropriate measure of central tendency.
(iv) Which one is ideal measure of dispersion ? Why?</td><td>20</td><td>CO3</td></tr>
<tr><td>Q.6</td><td>The equation of two lines of regression for the data set are
<table><tr><th>X</th><th>Y</th></tr><tr><td>57</td><td>67</td></tr><tr><td>58</td><td>68</td></tr><tr><td>59</td><td>65</td></tr><tr><td>59</td><td>68</td></tr></table></td><td>20</td><td>CO4</td></tr>
</table>

		60	72	
		61	72	
		62	69	
		64	71	

Regression equation of Y on X is

$$Y-69=0.545(X-60)$$

and Regression equation of X on Y is

$$X-60=0.67(y-69)$$

Comment on the following questions.

(i) How to predict the value of X for given value of Y.

(ii) How to predict the value of Y for given value of X.

(iii) The value of regression coefficients are 0.67 and 0.545. Comments on the correlation coefficients.

(iv) Give a real life example on the same relationship shared by X and Y in the above data sets.

ANSWERS