

**BOARD OF INTERMEDIATE AND SECONDARY EDUCATION,  
MULTAN**  
**OBJECTIVE KEY FOR INTER (PART I / II) Annual Examination, 2016**  
Name of Subject Business Math of Stat Session \_\_\_\_\_

Q. Nos.	Paper Code	Paper Code	Paper Code	Paper Code
	8641			
1.	B			
2.	C			
3.	C			
4.	A			
5.	D			
6.	D			
7.	A			
8.	A			
9.	C			
10.	B			
11.	B			
12.	C			
13.	A			
14.	C			
15.	A, B, C, D			
16.				
17.				
18.				
19.				
20.				

**سرٹیفیکیٹ بابت تصحیح سوالیہ پرچہ/ مارکنگ Key**

ہم نے Business Math of Stat پرچہ II گروپ: \_\_\_\_\_ سیم: \_\_\_\_\_ انٹرمیڈیٹ 2016ء کا سوالیہ پرچہ لکھا ہے اس پر مشورہ  
(Subjective & Objective) کو نظر میں چیک کر لیا ہے یہ پرچہ سلیس کے مین ملائق Sol کیا گیا ہے۔ اس سوالیہ پرچہ میں کسی قسم کی کوئی  
غلطی نہ ہے۔ ہم نے سوالیہ پرچہ کا اردو اور انگریزی Version بھی چیک کر لیا ہے یہ Version آپس میں مطابقت رکھتے ہیں اور سلیس (Syllabus)  
کے مطابق بھی ہیں۔ نیز اس پرچہ کی Key کی بابت بھی تصدیق کی جاتی ہے کہ یہ بھی درست بنائی گئی ہے۔ اس میں بھی کسی قسم کی کوئی غلطی نہ ہے۔  
مزید یہ کہ ہم نے Key بنانے سے متعلق دفتر کی جانب سے تیار کردہ ہدایات وصول کر کے ان کا ہنودر مطالعہ کر لیا ہے اور ان کی روشنی میں Key بنائی ہے۔

PREPARED & CHECKED BY

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Paper Code

Number: 8641

2016 (A)

Roll No. \_\_\_\_\_

INTERMEDIATE PART-II (12<sup>th</sup> CLASS)

## BUSINESS MATHEMATICS &amp; STATISTICS

## PAPER-II (COMMERCE GROUP)

TIME ALLOWED: 20 Minutes

MAXIMUM MARKS: 15

OBJECTIVE

**Note:** You have four choices for each objective type question as A, B, C and D. The choice which you think is correct, fill that circle in front of that question number. Use marker or pen to fill the circles. Cutting or filling two or more circles will result in zero mark in that question. Attempt as many questions as given in objective type question paper and leave others blank. No credit will be awarded in case BUBBLES are not filled. Do not solve question on this sheet of OBJECTIVE PAPER.

## Q.No.1

- (1) The data which has already been collected by some one is called:-  
 (A) Raw Data (B) Secondary Data (C) Arrayed Data (D) Fictitious Data
- (2)  $\bar{X}$  is a:-  
 (A) Constant (B) Parameter (C) Statistic (D) Coefficient
- (3) The number of chairs in the college is an example of:-  
 (A) Constant (B) Continuous Variable (C) Discrete Variable (D) Both A and B
- (4) Total of relative frequency is always:-  
 (A) One (B) Two (C) Half (D) Quarter
- (5) The graph of frequency distribution is called:-  
 (A) Histogram (B) Pie-chart (C) Ogive (D) Histogram
- (6) Row caption is also called:-  
 (A) Title (B) Body (C) Box-head (D) Stub
- (7) A pie-diagram is represented by a:-  
 (A) Circle (B) Square (C) Triangle (D) Rectangle
- (8) \_\_\_\_\_ average is affected by extreme values.  
 (A) A.M. (B) G.M. (C) H.M. (D) Median
- (9) The mean of 5 values is 10 then sum will be:-  
 (A) 2 (B) 15 (C) 50 (D)  $\frac{5}{10}$
- (10) If a distribution has two modes, then it is called:-  
 (A) Uni-model (B) Bi-model (C) Tri-model (D) None of these
- (11) When the price of a period is divided by the price of the preceding period, we obtain:-  
 (A) Price Relatives (B) Link Relatives (C) Quantity Relatives (D) Value Relatives
- (12) \_\_\_\_\_ average is the most suitable for computing chain index nos.  
 (A) A.M. (B) Median (C) G.M. (D) H.M.
- (13) Base year quantities are used as weights in:-  
 (A) Laspeyre's I. No. (B) Paache's I. No. (C) Fisher's I. No. (D) Chain I. No.
- (14) The probability of an event can not be:-  
 (A) = 0 (B) < 1 (C) > 1 (D) = 1
- (15)  ${}^n C_0 =$   
 (A) 0 (B) 0! (C) n! (D) n.

**SECTION-II****NOTE: - Attempt any three questions.**

- 5.(a) Make a frequency distribution by taking class interval as one for number of mistakes in typing of 30 candidates. 5, 3, 5, 6, 7, 1, 0, 8, 4, 2, 3, 5, 8, 7, 1, 2, 4, 8, 7, 6, 5, 10, 9, 3, 7, 6, 4, 7, 9, 1.

- (b) Draw frequency polygon for the following frequency distribution:-

Classes	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49
$f$	4	14	24	35	15

- 6.(a) Find Arithmetic Mean of the following values:-

10, 15, 9, 16, 12, 23, 21, 25, 20, 9, 10, 22, 26 and 28.

- (b) Find Arithmetic Mean for the following data using short - cut method.

Class interval	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50
Frequency	10	12	15	18	9	5

- 7.(a) Find Median for the following data:-

43, 38, 36, 37, 48, 50, 44, 52, 40, 58, 54, 43

- (b) For the following data, obtain the mode:-

Group	0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 34
$f$	5	11	19	25	20	14	9

- 8.(a) Convert the following prices into price relatives using Chain Base Method:-

Year	2001	2002	2003	2004	2005	2006	2007	2008	2009
Price	24	25	28	29	31	33	35	42	51

- (b) The price and quantities of three commodities are shown below:-

Commodities	Prices (Rs./kg)		Quantities (kgs)	
	1993	1998	1993	1998
Wheat	6	10	50	60
Barley	2	2	100	120
Maize	4	6	60	60

Using 1993 as the base period and the base period quantities as weights, compute the weighted aggregative price index.

- 9.(a) A coin is tossed thrice. What is the probability of getting (i) at least two heads (ii) no head

- (b) A bag contains 7 white, 5 black and 4 red balls. If two balls are drawn at random, find the probability that (i) Both balls are white (ii) One is black and other is red

INTERMEDIATE PART-II (12<sup>th</sup> CLASS)

## BUSINESS MATHEMATICS &amp; STATISTICS

## PAPER-II (COMMERCE GROUP)

TIME ALLOWED: 2.10 Hours

MAXIMUM MARKS: 60

SUBJECTIVE

NOTE: - Write same question number and its part number on answer book,  
as given in the question paper.

SECTION-I

6 × 2 = 12

## 2. Attempt any six parts.

- (i) Define Variable.
- (ii) Define the term Classification.
- (iii) What is Frequency Distribution?
- (iv) Name two branches of Statistics.
- (v) What is measure of Central Tendency?
- (vi) Give two characteristics of Statistics.
- (vii) Find Arithmetic Mean given that  $X = 20 + 2u$ ,  $\sum fu = 40$  and  $n = 100$
- (viii) What are important types of Averages?
- (ix) Write two properties of Arithmetic Mean.

6 × 2 = 12

## 3. Attempt any six parts.

- (i) Define Data.
- (ii) Define Qualitative Data.
- (iii) Write main sources of Primary Data.
- (iv) Define Secondary Data.
- (v) Define Price Relatives.
- (vi) If Paasche's index number = 74.76 and Laspeyre's index number = 75.76, then find Fisher's index number
- (vii) If  $\sum p_n q_n = 481$ ,  $\sum p_o q_n = 402$ , find Paasche's index number.
- (viii) Write two uses of Index Number.
- (ix) Define Simple Index Number.

6 × 2 = 12

## 4. Attempt any six parts.

- (i) Define Classification of Data.
- (ii) How an Ogive is constructed?
- (iii) Differentiate between Class Frequency and Relative Frequency.
- (iv) If the class - limits of the classes are: 18 - 26, 27 - 35, 36 - 44, 45 - 53, then make the class-boundaries of these limits.
- (v) Define s Singleton Set.
- (vi) State the addition law for two not mutually exclusive events.
- (vii) What do you understand by sure event?
- (viii) Define Random Experiment.
- (ix) When a die is rolled, find the probability of getting a prime number.