

**INTERMEDIATE PART-I (11<sup>th</sup> CLASS)****BUSINESS MATHEMATICS & STATISTICS PAPER-I (NEW SCHEME)  
(COMMERCE GROUP)**

TIME ALLOWED: 1.45 Hours

MAXIMUM MARKS: 40

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

2. **Attempt any six parts.** 6 × 2 = 12
- (i) Find the ratio between 5 minutes and 30 seconds.
- (ii) If  $45 : 60 :: 900 : x$  then find the value of  $x$ .
- (iii) 160 is 20% of what number?
- (iv) Define Percentage.
- (v) Find simple interest on an amount of Rs.20000 invested for 4 years at the rate of  $2\frac{1}{2}\%$  annually.
- (vi) Define Compound Interest.
- (vii) Write any two types of annuity.
- (viii) Solve the equation  $\frac{2x}{7} + 1 = 0$
- (ix) Solve the equation  $3x + 2 = 2x + 6$
3. **Attempt any six parts.** 6 × 2 = 12
- (i) Find  $x$  and  $y$  if  $x - 2y = 4$ ,  $3x + 2y = 7$
- (ii) Find  $x$  if  $x^2 - (a + b)x + ab = 0$
- (iii) Write quadratic equation and quadratic formula.
- (iv) Write the domain and range of the relation  $\{(0, 3), (3, 3), (5, 1), (6, 1)\}$
- (v)  $f(x) = \sqrt{x^2 - 3x}$ , find  $f(3)$  and  $f(4)$
- (vi) Define order of a matrix with an example.
- (vii) Show that  $A = \begin{bmatrix} 0 & 3 \\ -3 & 0 \end{bmatrix}$  is a skew symmetric.
- (viii) Convert 26 into binary system.
- (ix) Evaluate  $(10101)_2 - (1111)_2$

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

- 4.(a) 60 men can build a house in 44 days. How many days will 40 men take to build the same house? 4
- (b) Calculate the present value of an annuity of Rs.400 each month for 4 years at 6% compounded monthly. 4
- 5.(a) The area of room is 120 square metres. If the length is 2 metres more than breadth, find the length and breadth of room. 4
- (b) Solve the equations  $465x + 75y = 615$ ,  $75x + 465y = 1005$  4
- 6.(a) Solve  $2x - 5y = 1$ ;  $3x + 4y = 16$  by using matrices. 4
- (b) Evaluate  $[(1011)_2 \times (111)_2] - (101)_2$  4

**BUSINESS MATHEMATICS & STATISTICS PAPER-I (NEW SCHEME)**  
**(COMMERCE GROUP)**

TIME ALLOWED: 15 Minutes

**OBJECTIVE**

MAXIMUM MARKS: 10

**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 bubble in front of that question number. Use marker or pen to fill the bubbles. Cutting or filling two or more bubbles 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 questions on this sheet of OBJECTIVE PAPER.

**Q.No.1**

- (1) The ratio between 850grms and 1.70kg is:  
 (A) 5 : 1                      (B) 1 : 2                      (C) 1 : 5                      (D) 2 : 1
- (2) What percent Rs.30 is of 300?  
 (A) 30%                      (B) 20%                      (C) 10%                      (D) 15%
- (3) The amount paid to an agent as remuneration for his services is called:  
 (A) Salary                      (B) Commission                      (C) Rent                      (D) Profit
- (4) An ordinary annuity which never stopped is called:  
 (A) Annuity                      (B) Compound interest                      (C) Compound amount                      (D) Perpetuity
- (5) If three times a number is 150, then the number is:  
 (A) 25                      (B) 40                      (C) 50                      (D) 60
- (6) Number of ways to solve a quadratic equation are:  
 (A) Two                      (B) Three                      (C) Four                      (D) Five
- (7) The solution of  $2x + y = 6$ ,  $x - y = 2$  is:  
 (A)  $\left(\frac{8}{3}, \frac{2}{3}\right)$                       (B)  $\left(\frac{3}{8}, \frac{3}{2}\right)$                       (C)  $\left(\frac{-3}{8}, \frac{3}{2}\right)$                       (D)  $\left(\frac{-8}{3}, \frac{-2}{3}\right)$
- (8) If  $f(x) = \frac{x+5}{x-5}$ , then  $f(0)$  is:  
 (A) 1                      (B) 10                      (C) 0                      (D) -1
- (9) The determinant of an identity matrix is equal to:  
 (A) 0                      (B) -1                      (C) 1                      (D) 2
- (10)  $(1001)_2$  in decimal system is:  
 (A) 9                      (B) 7                      (C) 13                      (D) 11



**BOARD OF INTERMEDIATE AND SECONDARY EDUCATION, MULTAN**  
**OBJECTIVE KEY FOR INTERMEDIATE ANNUAL/SUPPLY EXAMINATION, 2019**

Name of Subject: B Maths Session: \_\_\_\_\_

Q.Nos	Paper Code	Paper Code	Paper Code	Paper Code
	2641			
1	B			
2	C			
3	B			
4	D			
5	C			
6	B			
7	A			
8	D			
9	C			
10	A			
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

سرٹیفکیٹ بابت صحیح سوالیہ پرچہ / مارکنگ Key

ہم نے مضمون بزنس میٹھ پرچہ 1 گروپ X سکیم X اٹھ سالانہ امتحان 2019ء کا سوالیہ پرچہ انشائیہ و معروضی (Subjective & Objective) کو بنظر عمیق چیک کر لیا ہے یہ پرچہ Syllabus کے عین مطابق Set 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۔ نیز اس پرچہ کی معروضی (MCQs) Key کی بابت تصدیق کی جاتی ہے کہ 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 بغور مطالعہ کر لیا ہے اور ان کی روشنی میں Key بنائی ہے۔ نیز سب ایگزامینرز کیلئے تفصیلی مارکنگ ہدایات / مارکنگ سکیم / Rubrics بھی تیار کر دی گئی ہیں۔

Prepared & Checked By:

Dated: 12-06-2019

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