

INTERMEDIATE PART-II (12th CLASS)**BUSINESS MATHEMATICS & STATISTICS (NEW SCHEME)****PAPER-II (COMMERCE GROUP)**

TIME ALLOWED: 1.45 Hours

SUBJECTIVE

MAXIMUM MARKS: 40

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) What are the basis of Classification?
- (ii) What is an un-grouped data?
- (iii) Define Class Boundaries.
- (iv) Write names of types of Diagram (any two).
- (v) Write two qualities of good Average.
- (vi) Write down advantages of arithmetic mean.
- (vii) Find arithmetic mean given that $D = X - 45$, $\sum D = 20$, $n = 10$
- (viii) Find median of the values 8, 9, 6, 3, 4, 10, 12, 7.
- (ix) Write down the two merits of mode.

3. Attempt any six parts.**6 × 2 = 12**

- (i) Define Inferential Statistics.
- (ii) What is Discrete Variable?
- (iii) Differentiate between Parameter and Statistic.
- (iv) Define Index Number.
- (v) What is Consumer Price Index Number?
- (vi) If $\sum p_n q_n = 500$, $\sum p_o q_n = 450$, $\sum p_o q_o = 475$ and $\sum p_n q_o = 480$. Calculate Fisher's Index.
- (vii) Define Sample Space.
- (viii) What is Impossible Event?
- (ix) Write down addition Law for not mutually exclusive events.

SECTION-II**NOTE: - Attempt any two questions.****2 × 8 = 16****4.(a)** Make frequency distribution from the following data taking classes

as 0 – 1, 2 – 3, 4 – 5, ----

5, 0, 1, 4, 0, 3, 8, 2, 0, 4, 2, 1

0, 7, 3, 1, 2, 6, 0, 2, 2, 5, 7, 2

3, 9, 6, 3, 4, 5, 4, 1, 2, 3, 1, 5

4

(b) Draw a multiple bar chart from the following data:

4

Countries	Birth Rate	Death Rate
Japan	32	19
India	33	14
Germany	16	10
Egypt	44	24
Australia	20	09

5.(a) The marks of 80 students in Statistics are given below. Calculate the arithmetic mean.

4

Marks	30–34	35–39	40–44	45–49	50–54
No. of students	14	16	23	18	9

(b) Compute the median from the following data:

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Class	10–19	20–29	30–39	40–49	50–59	60–69
F	5	12	22	38	15	8

6.(a) Find index number of prices taking

4

(i) 1930 as base

(ii) Average of last 3 years as base

Years	1930	1931	1932	1933	1934	1935	1936
Prices	15	14	19	21	24	23	25

(b) If two fair dice are rolled find the probabilities that sum of dots will be:

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(i) Exactly four

(ii) Exactly seven

BUSINESS MATHEMATICS & STATISTICS (NEW SCHEME)

PAPER-II (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) A numerical quantity computed on the basis of population data is termed as:
 (A) Parameter (B) Statistic (C) Continuous (D) Discrete
- (2) Census returns are:
 (A) Primary data (B) Secondary data (C) Qualitative data (D) True data
- (3) The length of a class is called:
 (A) Class boundary (B) Class frequency (C) Class mark (D) Class interval
- (4) If 8 observations, X_1 to X_8 then the correct notation for adding the observations 4 to 8 is:
 (A) $\sum_{i=1}^4 X_i$ (B) $\sum_{i=4}^8 X_i$ (C) $\sum_{i=8}^4 X_i$ (D) $\sum_{i=4}^n X_i$
- (5) Arithmetic mean is based on:
 (A) Extreme values (B) Middle value (C) All the values (D) Most common values
- (6) If $\bar{X} = 25$, which of the following will be minimum?
 (A) $\sum (X - 27)^2$ (B) $\sum (X - 25)^2$ (C) $\sum (X - 22)^2$ (D) $\sum (X + 25)^2$
- (7) If L = Laspeyre's Index and P = Paasche's Index then Fisher's ideal index is written as:
 (A) $\sqrt{\frac{P}{L}}$ (B) $\sqrt{\frac{L}{P}}$ (C) $\sqrt{L \times P}$ (D) None of these
- (8) The formula of Link relatives is:-
 (A) $\frac{P_o}{P_{n-1}} \times 100$ (B) $\frac{P_n}{P_{n-1}} \times 100$ (C) $\frac{P_n}{P_o} \times 100$ (D) $\frac{\sum P_n}{\sum P_o} \times 100$
- (9) Two dice are rolled together, the total possible results are:
 (A) 62 (B) 2^6 (C) 12 (D) 36
- (10) If $A \cap B = \phi$, then the events A and B are called:
 (A) Equally likely (B) Exhaustive (C) Mutually exclusive (D) Independent

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

Name of Subject: _____ Session: _____

Q.Nos	Paper Code	Paper Code	Paper Code	Paper Code
	4641			
1	A			
2	A			
3	D			
4	B			
5	C			
6	B			
7	C			
8	B			
9	D			
10	C			
11				
12				
13				
14				
15				
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17				
18				
19				
20				

برقیٹک بابت صحیح سوال پرچہ مارکنگ Key

ہم نے مضمون بنزس سٹیٹ پرچہ X گروپ X سکیم مینو انتہر لائنہ امتحان 2019ء کا سوالیہ پرچہ انشائیہ و معروضی (Subjective & Objective) کو بنظر عین 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: 21-05-19

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