Reg. No..

Name.......................................

FYUG PROGRAMME EXAMINATIONS, NOVEMBER 2024
(2024 Admission Regular)
SEMESTER I – CORE COURSE - BMS(HONS.) (IB)
MS1CC03B24: BUSINESS STATISTICS AND LOGIC

Time: 2 Hours   Maximum Marks: 70

PART A

I. **Answer any 5 questions. Each question carries 2 marks**

Q.No:	QUESTIONS	CO	LEVEL
1.	Determine $P(A \cap B)$. If $P(A) = 5/13$, $P(B) = 3/7$, $P(A \cup B) = 59/91$.	III	Ap
2.	Define independence of events.	III	R
3.	Define compound event.	III	R
4.	Define conditional probability.	III	R
5.	Choose among the following. If POSTER is coded as 592314 and DARK is coded as 8647, then STROKE will be coded as: a)234917 b) 234971 c) 493287 d) 329417	IV	Ap
6.	Select the odd number out from the following: 8, 27, 64, 100, 125, 216, 343 a) 27 b) 100 c) 125 d) 343	IV	Ap
7.	Calculate the sum of first 12 even natural numbers. a) 156 b) 126 c) 108 d) 112	IV	Ap
8.	Choose the correct option from the following. A is B's sister. C is B's mother. D is C's father. E is D's mother. Then, how is A related to D. a) Grandfather b) Grandmother c) daughter d) Granddaughter	IV	Ap

(5x2=10)

PART B

II. **Answer any 4 questions. Each question carries 5 marks**

Q.No:	QUESTIONS	CO	LEVEL
9.	Explain Frequency Polygon.	I	R
10.	Explain measures of central tendency? Define any Three of them	I	U

11.	Calculate Karl Pearson's coefficient of correlation from the data given	II	Ap
	<table><tr><td>X</td><td>2</td><td>4</td><td>6</td><td>8</td><td>10</td></tr><tr><td>Y</td><td>12</td><td>14</td><td>16</td><td>18</td><td>20</td></tr></table>		
12.	Comment on the two regression lines	II	R
13.	Explain the terms random experiment, sample point, sample space , event .	III	U
14	Define (1) Mutually exclusive events (2) Independent events	III	R

<div align="right">(4x5=20)</div>

<div align="center">PART C</div>

III.   Answer any 2 questions. Each question carries 20 marks.

Q.No:	QUESTIONS	CO	LEVEL
15.	Define co-efficient of variation. The yields of two varieties of wheat each cultivated in 10 locations are given below <table><tr><td>Variety</td><td colspan="10">Yield (kg/plot)</td></tr><tr><td>A</td><td>21.6</td><td>29.5</td><td>27.3</td><td>41.6</td><td>38.4</td><td>39.2</td><td>41.1</td><td>46.5</td><td>40.0</td><td>47.1</td></tr><tr><td>B</td><td>23.5</td><td>27.4</td><td>23.8</td><td>28.3</td><td>24.6</td><td>25.2</td><td>27.3</td><td>27.1</td><td>25.6</td><td>29.1</td></tr></table> Find out the yield of which variety is relatively more consistent.	I	Ap
16.	Explain in detail about the types of data and the sources of data	I	U
17.	From the following data find the coefficient of correlation and obtain the two regression equations <table><tr><td>X</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td></tr><tr><td>Y</td><td>9</td><td>8</td><td>10</td><td>12</td><td>11</td><td>13</td><td>14</td><td>16</td><td>15</td></tr></table>	II	Ap
18.	Define mutually exclusive and exhaustive events and write examples of each of the following. (i) mutually exclusive and exhaustive events. (ii) mutually exclusive but not exhaustive events. (iii) not mutually exclusive but exhaustive events.	III	U

<div align="right">(2x20=40)</div>

CO : Course Outcomes Level : R – Remember, U – Understand, Ap- Apply, An- Analyze,

E- Evaluate, C- Create