Dataset	GNB (1)	OSB (2)	OKNORAU (3)	TBAC (4)	OTBAC (5)	TBAW (6)	OTBAW (7)
glass4	0.572 ± 0.129	0.771 ± 0.138	0.778 ± 0.139	0.765 ± 0.161	0.806 ± 0.159	0.687 ± 0.165	0.657 ± 0.164
ecoli-0-2-3-4- vs -5	$0.780 \stackrel{-}{\pm} 0.098$	0.777 ± 0.117	0.873 ± 0.092	0.902 ± 0.077	0.900 ± 0.078	0.864 ± 0.095	0.838 ± 0.107
glass-0-1-6-vs-2	0.565 ± 0.111	0.593 ± 0.096	0.587 ± 0.128	$0.698 \stackrel{all}{\pm} 0.127$	0.709 ± 0.115	0.604 ± 0.084	0.612 ± 0.082
ecoli-0-1-vs-5	0.800 ± 0.143	0.830 ± 0.152	0.891 ± 0.088	0.893 ± 0.080	0.895 ± 0.082	$0.896 \stackrel{1}{\pm} 0.079$	$0.891 \stackrel{1}{\pm} 0.080$
yeast-1-4-5-8-vs-7	0.544 ± 0.012	0.544 ± 0.022	0.574 ± 0.045	0.629 ± 0.098	0.628 ± 0.098	0.591 ± 0.071	0.594 ± 0.072
ecoli4	0.886 ± 0.083	0.891 ± 0.068	0.922 ± 0.079	0.933 ± 0.082	0.934 ± 0.080	$0.899 \overset{1,2}{\pm} 0.075$	0.887 ± 0.078
led7 digit - 0 - 2 - 4 - 5 - 6 - 7 - 8 - 9 - vs - 1	0.853 ± 0.073	0.859 ± 0.067	0.876 ± 0.070	0.654 ± 0.090	0.653 ± 0.090	$0.843 \stackrel{7}{\pm} 0.103$	0.839 ± 0.096
glass5	0.948 ± 0.103	0.915 ± 0.149	0.915 ± 0.149	0.908 ± 0.155	0.908 ± 0.155	0.908 ± 0.154	0.908 ± 0.154
ecoli-0-3-4-6-vs-5	0.755 ± 0.102	0.797 ± 0.121	0.884 ± 0.110	0.898 ± 0.090	0.900 ± 0.090	0.851 ± 0.109	0.821 ± 0.117
yeast-0-5-6-7-9-vs-4	0.501 ± 0.026	0.502 ± 0.022	0.612 ± 0.146	0.794 ± 0.049	0.805 ± 0.049	0.635 ± 0.134	0.632 ± 0.132
yeast6	0.636 ± 0.023	0.653 ± 0.044	0.722 ± 0.072	0.885 ± 0.056	0.885 ± 0.056	0.798 ± 0.102	0.833 ± 0.090
ecoli-0-6-7-vs-5	0.813 ± 0.124	0.834 ± 0.111	0.870 ± 0.112	0.869 ± 0.093	0.874 ± 0.096	0.849 ± 0.100	0.838 ± 0.103
$glass\hbox{-} 0\hbox{-} 1\hbox{-} 6\hbox{-} vs\hbox{-} 5$	0.956 ± 0.109	0.920 ± 0.142	0.920 ± 0.142	0.886 ± 0.150	0.886 ± 0.150	0.886 ± 0.150	0.886 ± 0.150
$ecoli\mbox{-}0\mbox{-}1\mbox{-}3\mbox{-}7\mbox{-}vs\mbox{-}2\mbox{-}6$	0.831 ± 0.193	0.844 ± 0.198	0.845 ± 0.199	0.847 ± 0.203	0.844 ± 0.203	0.828 ± 0.204	0.835 ± 0.197
yeast - 0 - 2 - 5 - 6 - vs - 3 - 7 - 8 - 9	0.675 ± 0.048	0.767 ± 0.058	0.769 ± 0.048	0.694 ± 0.056	0.772 ± 0.053	0.723 ± 0.061	0.782 ± 0.071
ecoli-0-1-4-7-vs-5-6	0.742 ± 0.131	0.816 ± 0.131	0.862 ± 0.112	0.838 ± 0.104	0.871 ± 0.104	0.826 ± 0.085	0.886 ± 0.075
yeast5	0.825 ± 0.024	$0.798 \stackrel{1}{\pm} 0.035$	0.841 ± 0.029	$0.975 \stackrel{1}{\pm} 0.021$	0.976 ± 0.020	$0.947 \stackrel{1}{\pm} 0.063$	0.950 ± 0.070
shuttle- $c2$ - vs - $c4$	$0.988 \stackrel{2}{\pm} 0.022$	0.937 ± 0.154	0.938 ± 0.154	0.905 ± 0.192	0.910 ± 0.185	0.899 ± 0.192	0.906 ± 0.184
ecoli - 0 - 1 - 4 - 7 - vs - 2 - 3 - 5 - 6	0.651 ± 0.090	0.661 ± 0.120	0.713 ± 0.126	0.689 ± 0.118	0.769 ± 0.129	0.725 ± 0.117	0.777 ± 0.111
yeast - 0 - 3 - 5 - 9 - vs - 7 - 8	0.550 ± 0.018	0.545 ± 0.037	0.606 ± 0.084	0.695 ± 0.073	0.698 ± 0.075	0.612 ± 0.084	0.639 ± 0.089
yeast-1- vs -7	0.594 ± 0.037	0.581 ± 0.047	0.648 ± 0.094	$1,2,3,6,7 \\ 0.680 \pm 0.100$	0.674 ± 0.096	0.606 ± 0.073	0.616 ± 0.078
$yeast\hbox{-}1\hbox{-}2\hbox{-}8\hbox{-}9\hbox{-}vs\hbox{-}7$	0.540 ± 0.011	0.538 ± 0.024	0.573 ± 0.054	0.687 ± 0.090	0.687 ± 0.089	0.611 ± 0.068	0.630 ± 0.075
ecoli-0-1-4-6-vs-5	0.847 ± 0.098	0.881 ± 0.088	0.892 ± 0.090	$1,2,3,6,7$ 0.899 ± 0.080	0.905 ± 0.078	0.887 ± 0.085	0.876 ± 0.090
$glass\hbox{-} 0\hbox{-} 1\hbox{-} 5\hbox{-} vs\hbox{-} 2$	0.555 ± 0.134	0.527 ± 0.112	0.578 ± 0.135	$1,2,3,6,7 \\ 0.685 \pm 0.115$	0.700 ± 0.117	0.551 ± 0.073	0.555 ± 0.069
yeast-2- vs -4	0.608 ± 0.128	0.556 ± 0.098	0.750 ± 0.171	0.868 ± 0.066	0.870 ± 0.060	0.728 ± 0.160	0.733 ± 0.161
glass-0-6-vs-5	$0.945 \stackrel{2}{\pm} 0.140$	0.936 ± 0.136	0.936 ± 0.136	0.875 ± 0.175	0.875 ± 0.175	0.875 ± 0.174	0.875 ± 0.174
glass2	0.607 ± 0.098	0.624 ± 0.094	0.614 ± 0.124	0.718 ± 0.115	0.738 ± 0.116	0.640 ± 0.094	0.643 ± 0.090
yeast-2-vs-8	0.637 ± 0.090	0.640 ± 0.096	0.765 ± 0.086 $1,2,6,7$	0.782 ± 0.111	0.799 ± 0.105	0.706 ± 0.116 $1,2$	0.688 ± 0.081
vowel0	0.915 ± 0.037	0.902 ± 0.026	0.916 ± 0.025	0.887 ± 0.058	0.930 ± 0.048	0.911 ± 0.033	0.912 ± 0.024
glass-0-4-vs-5	0.975 ± 0.083	0.940 ± 0.112	0.940 ± 0.112	0.935 ± 0.120	0.940 ± 0.117	$0.935 \stackrel{2,4}{\pm} 0.120$	0.940 ± 0.117
$glass\hbox{-}0\hbox{-}1\hbox{-}4\hbox{-}6\hbox{-}vs\hbox{-}2$	0.579 ± 0.128	0.592 ± 0.131	0.594 ± 0.146	0.695 ± 0.118 $1,2,3,6,7$	$0.721 \pm 0.106 \\ 1,2,3,6,7$	0.634 ± 0.089	0.645 ± 0.084 $1,3$
yeast4	0.551 ± 0.039	0.530 ± 0.030	0.561 ± 0.047 1.2	0.810 ± 0.065 $1,2,3,6,7$	0.812 ± 0.064 $1,2,3,6,7$	0.623 ± 0.131	0.633 ± 0.140 2.6
ecoli-0-4- 6 - vs - 5	$0.851 \stackrel{?}{\pm} 0.114$	0.873 ± 0.107	0.892 ± 0.101	0.901 ± 0.083	0.899 ± 0.083	0.888 ± 0.093	0.883 ± 0.095
page-blocks-1-3-vs-4	0.765 ± 0.095	0.776 ± 0.104	0.817 ± 0.127 $1.246.7$	0.754 ± 0.092	0.779 ± 0.108	0.763 ± 0.095	0.770 ± 0.094
yeast - 0 - 2 - 5 - 7 - 9 - vs - 3 - 6 - 8	0.576 ± 0.028	0.541 ± 0.052	$\begin{array}{c} 1,2,4,6,7 \\ 0.641 \pm 0.131 \end{array}$	0.886 ± 0.032	0.886 ± 0.033 $1,2,3,6,7$	0.692 ± 0.141	0.800 ± 0.143
ecoli- 0 - 1 - vs - 2 - 3 - 5	0.607 ± 0.157	0.605 ± 0.156	0.752 ± 0.163	0.719 ± 0.136	0.778 ± 0.159	0.752 ± 0.134	0.812 ± 0.132
ecoli-0-6-7-vs-3-5	0.587 ± 0.158	0.620 ± 0.167	0.618 ± 0.168	0.586 ± 0.121	0.677 ± 0.122	0.629 ± 0.138	0.663 ± 0.134
ecoli-0-3-4-7-vs-5-6	0.778 ± 0.080	0.833 ± 0.127	0.885 ± 0.084	0.872 ± 0.080	0.884 ± 0.077	0.842 ± 0.090	0.840 ± 0.098
ecoli - 0 - 2 - 6 - 7 - vs - 3 - 5	0.586 ± 0.145	0.617 ± 0.158	0.626 ± 0.154	0.599 ± 0.118	0.693 ± 0.108	0.627 ± 0.124	0.668 ± 0.128 $1,2,3,4,6$
shuttle-c0-vs-c4	0.990 ± 0.012	0.989 ± 0.012	0.989 ± 0.012	0.991 ± 0.012	0.991 ± 0.012	0.991 ± 0.012	0.991 ± 0.012
ecoli-0-3-4- vs -5	0.788 ± 0.105	0.803 ± 0.128	0.890 ± 0.109	0.908 ± 0.105	0.908 ± 0.105	0.847 ± 0.120	0.814 ± 0.123
	<u> </u>	<u> </u>	1,2,6,7	1,2,3,6,7	1,2,3,6,7	1,2,7	_

Table 1: Results for BAC metric

$\mid \text{GNB (1)} \mid \text{OSB (2)} \mid \text{OKNORAU (3)} \mid \text{TBAC (4)} \mid \text{OTBAC (5)} \mid \text{TBAW (6)} \mid \text{OTBAW (7)}$									
$Mean\ rank$	2.341	2.634	4.427	4.829	6.061	3.610	4.098		
	_	_	1,2,6	1,2,6	all	1,2	1,2		

Table 2: Results for mean ranks according to BAC metric

Dataset	GNB (1)	OSB (2)	OKNORAU (3)	TBAC (4)	OTBAC (5)	TBAW (6)	OTBAW (7)
glass4	0.190 ± 0.222	0.395 ± 0.190	0.451 ± 0.204	0.473 ± 0.237	0.517 ± 0.221	0.285 ± 0.169	0.231 ± 0.147
ecoli-0-2-3-4-vs-5	0.442 ± 0.170	0.492 ± 0.237	0.682 ± 0.199	0.796 ± 0.121	0.779 ± 0.126	0.657 ± 0.200	0.604 ± 0.223
glass-0-1-6-vs-2	0.184 ± 0.057	0.196 ± 0.050	0.197 ± 0.070	0.293 ± 0.106	0.300 ± 0.099	0.203 ± 0.047	0.207 ± 0.052
ecoli-0-1- vs -5	0.667 ± 0.299	0.682 ± 0.285	$0.819 \stackrel{1}{\pm} 0.127$	0.857 ± 0.110	0.858 ± 0.115	$0.844 \stackrel{1}{\pm} 0.117$	0.826 ± 0.133
yeast-1-4-5-8-vs-7	0.090 ± 0.002	0.090 ± 0.004	0.097 ± 0.009	0.144 ± 0.052	0.143 ± 0.052	0.111 ± 0.036	0.115 ± 0.041
ecoli4	0.454 ± 0.158	0.449 ± 0.135	0.653 ± 0.208	0.798 ± 0.169	0.764 ± 0.161	0.556 ± 0.229	0.519 ± 0.224
led7 digit - 0 - 2 - 4 - 5 - 6 - 7 - 8 - 9 - vs - 1	0.553 ± 0.117	0.532 ± 0.103	0.630 ± 0.152	0.389 ± 0.173	0.386 ± 0.173	0.468 ± 0.125	0.446 ± 0.108
glass5	$\begin{array}{c} 2,4,5,6,7 \\ 0.747 \pm 0.183 \end{array}$	0.721 ± 0.256	0.721 ± 0.256	0.809 ± 0.278	0.809 ± 0.278	0.805 ± 0.276	0.805 ± 0.276
ecoli-0-3-4-6- vs -5	0.384 ± 0.145	0.467 ± 0.189	0.697 ± 0.211	0.768 ± 0.154	0.765 ± 0.152	0.604 ± 0.210	0.540 ± 0.220
yeast - 0 - 5 - 6 - 7 - 9 - vs - 4	0.176 ± 0.008	$0.176 \stackrel{1}{\pm} 0.007$	0.268 ± 0.131	0.444 ± 0.074	0.444 ± 0.076	0.285 ± 0.124	0.272 ± 0.109
yeast6	0.063 ± 0.004	0.067 ± 0.009	$0.093 \stackrel{1,2}{\pm} 0.032$	0.368 ± 0.050	0.365 ± 0.052	0.204 ± 0.139	0.252 ± 0.141
ecoli-0-6-7-vs-5	0.610 ± 0.231	$0.518 \stackrel{1}{\pm} 0.166$	0.662 ± 0.207	$0.741 \stackrel{all}{\pm} 0.156$	0.731 ± 0.155	0.633 ± 0.202	0.561 ± 0.187
$glass\hbox{-} 0\hbox{-} 1\hbox{-} 6\hbox{-} vs\hbox{-} 5$	$0.807 \stackrel{2}{\pm} 0.227$	0.798 ± 0.259	0.798 ± 0.259	0.776 ± 0.267	0.776 ± 0.267	0.776 ± 0.267	$0.772 \stackrel{2}{\pm} 0.265$
ecoli - 0 - 1 - 3 - 7 - vs - 2 - 6	0.421 ± 0.251	0.593 ± 0.344	$0.615 \stackrel{-}{\pm} 0.357$	0.696 ± 0.380	0.659 ± 0.370	0.514 ± 0.313	0.497 ± 0.305
yeast - 0 - 2 - 5 - 6 - vs - 3 - 7 - 8 - 9	0.466 ± 0.094	0.586 ± 0.090	0.592 ± 0.076	0.512 ± 0.112	0.618 ± 0.087	$0.538 \stackrel{1}{\pm} 0.111$	0.572 ± 0.102
ecoli - 0 - 1 - 4 - 7 - vs - 5 - 6	0.590 ± 0.239	0.645 ± 0.223	0.735 ± 0.189	0.752 ± 0.180	$0.776 \stackrel{all}{\pm} 0.182$	0.658 ± 0.148	0.631 ± 0.141
yeast5	0.152 ± 0.019	0.136 ± 0.022	0.168 ± 0.028	0.613 ± 0.067	0.614 ± 0.067	0.525 ± 0.193	0.546 ± 0.181
shuttle-c2-vs-c4	0.881 ± 0.211	0.866 ± 0.312	0.868 ± 0.309	0.813 ± 0.383	0.827 ± 0.366	0.736 ± 0.375	0.776 ± 0.361
ecoli - 0 - 1 - 4 - 7 - vs - 2 - 3 - 5 - 6	0.426 ± 0.208	0.432 ± 0.240	$0.533 \stackrel{6}{\pm} 0.233$	$0.500 \stackrel{6}{\pm} 0.242$	$0.645 \stackrel{6}{\pm} 0.231$	0.564 ± 0.219	0.555 ± 0.171
$yeast\hbox{-}0\hbox{-}3\hbox{-}5\hbox{-}9\hbox{-}vs\hbox{-}7\hbox{-}8$	0.196 ± 0.006	0.200 ± 0.044	0.269 ± 0.119	0.365 ± 0.094	$0.362 \stackrel{all}{\pm} 0.101$	0.253 ± 0.095	0.269 ± 0.079
yeast-1-vs-7	0.148 ± 0.011	0.144 ± 0.015	0.190 ± 0.064	0.236 ± 0.077	0.228 ± 0.066	0.160 ± 0.045	0.166 ± 0.046
$yeast\hbox{-} 1\hbox{-} 2\hbox{-} 8\hbox{-} 9\hbox{-} vs\hbox{-} 7$	0.066 ± 0.001	0.066 ± 0.003	0.072 ± 0.008	0.170 ± 0.058	0.170 ± 0.058	$0.101 \stackrel{2}{\pm} 0.052$	0.115 ± 0.059
ecoli-0-1-4-6- vs -5	0.652 ± 0.214	0.626 ± 0.173	0.712 ± 0.180	0.805 ± 0.113	0.798 ± 0.111	0.694 ± 0.184	0.643 ± 0.212
$glass\hbox{-} 0\hbox{-} 1\hbox{-} 5\hbox{-} vs\hbox{-} 2$	0.200 ± 0.081	0.184 ± 0.058	0.215 ± 0.099	0.294 ± 0.099	0.304 ± 0.098	0.194 ± 0.042	0.195 ± 0.039
yeast-2-vs-4	0.301 ± 0.222	0.221 ± 0.112	0.491 ± 0.243	0.724 ± 0.112	0.702 ± 0.100	0.459 ± 0.253	0.437 ± 0.213
$glass\hbox{-} 0\hbox{-} 6\hbox{-} vs\hbox{-} 5$	0.867 ± 0.273	0.868 ± 0.249	0.868 ± 0.249	0.793 ± 0.325	0.793 ± 0.325	0.789 ± 0.324	0.789 ± 0.324
glass2	0.186 ± 0.050	0.194 ± 0.048	0.194 ± 0.068	0.304 ± 0.105	0.321 ± 0.112	$0.201 \stackrel{-}{\pm} 0.052$	0.202 ± 0.052
yeast-2-vs-8	0.193 ± 0.205	0.179 ± 0.172	0.357 ± 0.191	0.633 ± 0.195	0.629 ± 0.178	0.369 ± 0.278	$0.177 \stackrel{6}{\pm} 0.104$
vowel0	0.720 ± 0.049	0.588 ± 0.036	0.628 ± 0.035	0.806 ± 0.077	0.812 ± 0.065	0.663 ± 0.049	0.584 ± 0.033
$glass\hbox{-} 0\hbox{-} 4\hbox{-} vs\hbox{-} 5$	0.925 ± 0.170	0.879 ± 0.187	0.879 ± 0.187	0.907 ± 0.189	0.913 ± 0.186	0.907 ± 0.189	0.913 ± 0.186
$glass\hbox{-} 0\hbox{-} 1\hbox{-} 4\hbox{-} 6\hbox{-} vs\hbox{-} 2$	0.177 ± 0.060	0.182 ± 0.056	0.186 ± 0.073	0.288 ± 0.102	0.308 ± 0.093	$0.205 \stackrel{-}{\pm} 0.048$	0.214 ± 0.055
yeast4	0.074 ± 0.006	0.070 ± 0.005	$0.076 \stackrel{1}{\pm} 0.008$	0.323 ± 0.054	0.323 ± 0.054	0.152 ± 0.119	0.166 ± 0.124
ecoli-0-4-6- vs -5	0.670 ± 0.212	0.650 ± 0.184	0.742 ± 0.200	0.784 ± 0.143	0.775 ± 0.143	0.721 ± 0.180	0.695 ± 0.190
page-blocks-1-3-vs-4	0.502 ± 0.143	0.489 ± 0.149	0.538 ± 0.167	0.539 ± 0.157	0.554 ± 0.165	0.519 ± 0.143	0.493 ± 0.145
yeast-0-2-5-7-9-vs-3-6-8	$0.206 \stackrel{2}{\pm} 0.012$	0.198 ± 0.055	0.307 ± 0.195	0.642 ± 0.094	0.623 ± 0.082	0.348 ± 0.201	0.498 ± 0.181
ecoli- 0 - 1 - vs - 2 - 3 - 5	0.267 ± 0.338	0.258 ± 0.332	0.598 ± 0.328	0.550 ± 0.310	0.646 ± 0.327	0.613 ± 0.258	0.695 ± 0.237
ecoli-0-6-7-vs-3-5	0.202 ± 0.307	0.260 ± 0.296	0.254 ± 0.297	0.226 ± 0.279	0.452 ± 0.238	0.305 ± 0.263	0.370 ± 0.232
ecoli-0-3-4-7-vs-5-6	0.414 ± 0.114	$0.563 \stackrel{1}{\pm} 0.198$	$0.714 \stackrel{1}{\pm} 0.155$	0.747 ± 0.125	0.753 ± 0.121	0.568 ± 0.173	0.544 ± 0.186
ecoli-0-2-6-7-vs-3-5	0.216 ± 0.296	$0.269 \stackrel{1}{\pm} 0.284$	0.296 ± 0.279	0.265 ± 0.275	0.489 ± 0.201	0.316 ± 0.247	$0.396 \stackrel{1}{\pm} 0.230$
shuttle-c0-vs-c4	0.978 ± 0.022	0.976 ± 0.021	$0.976 \stackrel{1}{\pm} 0.021$	0.991 ± 0.013	0.991 ± 0.013	$0.991 \stackrel{1}{\pm} 0.014$	0.991 ± 0.014
ecoli-0-3-4- vs -5	0.443 ± 0.172	0.489 ± 0.211	$0.720 \stackrel{-}{\pm} 0.189$	0.800 ± 0.165	0.798 ± 0.163	0.607 ± 0.240	0.521 ± 0.233
	l –	1	1,2,6,7	1,2,3,6,7	1,2,3,6,7	1,2,7	_

Table 3: Results for F1 metric

	GNB (1) OSB (2) OKNORAU (3) TBAC (4) OTBAC (5) TBAW (6) OTBAW (7)									
Mean rank	2.341	2.280	4.159	5.634	6.098	3.878	3.610			
	_	_	1,2	1,2,3,6,7	1,2,3,6,7	1,2	1,2			

Table 4: Results for mean ranks according to F1 metric

Dataset	GNB (1)	OSB (2)	OKNORAU (3)	TBAC (4)	OTBAC (5)	TBAW (6)	OTBAW (7)
glass4	0.207 ± 0.281	0.311 ± 0.196	0.383 ± 0.211	0.436 ± 0.249	0.457 ± 0.223	0.209 ± 0.149	0.151 ± 0.112
ecoli-0-2-3-4-vs-5	0.337 ± 0.200	0.427 ± 0.282	0.618 ± 0.257	0.790 ± 0.174	0.760 ± 0.181	0.606 ± 0.273	0.546 ± 0.288
$glass\hbox{-}0\hbox{-}1\hbox{-}6\hbox{-}vs\hbox{-}2$	0.106 ± 0.034	0.111 ± 0.030	0.115 ± 0.043	0.188 ± 0.073	0.192 ± 0.069	0.117 ± 0.032	$0.120 \stackrel{1}{\pm} 0.036$
ecoli-0-1- vs -5	0.785 ± 0.364	0.730 ± 0.312	$0.879 \stackrel{1}{\pm} 0.145$	0.963 ± 0.094	0.957 ± 0.103	0.921 ± 0.136	$0.887 \stackrel{1}{\pm} 0.167$
yeast-1-4-5-8- vs -7	0.047 ± 0.001	0.047 ± 0.002	$0.051 \stackrel{2}{\pm} 0.005$	0.084 ± 0.031	0.084 ± 0.031	$0.061 \stackrel{2}{\pm} 0.022$	0.064 ± 0.025
ecoli4	0.315 ± 0.155	0.306 ± 0.135	0.538 ± 0.241	0.752 ± 0.214	0.692 ± 0.207	0.458 ± 0.279	0.417 ± 0.266
led7digit - 0 - 2 - 4 - 5 - 6 - 7 - 8 - 9 - vs - 1	0.428 ± 0.117	$0.395 \stackrel{-}{\pm} 0.099$	0.533 ± 0.200	0.510 ± 0.245	0.490 ± 0.238	0.339 ± 0.105	$0.317 \stackrel{2}{\pm} 0.091$
glass 5	0.655 ± 0.213	$0.660 \overset{6,7}{\pm} 0.272$	0.660 ± 0.272	0.850 ± 0.292	0.850 ± 0.292	$0.843 \stackrel{7}{\pm} 0.293$	0.843 ± 0.293
ecoli-0-3-4-6-vs-5	0.274 ± 0.157	0.350 ± 0.189	0.621 ± 0.245	0.734 ± 0.186	0.725 ± 0.185	0.518 ± 0.250	0.450 ± 0.255
yeast - 0 - 5 - 6 - 7 - 9 - vs - 4	0.097 ± 0.005	$0.097 \stackrel{1}{\pm} 0.004$	0.168 ± 0.105	0.321 ± 0.091	0.312 ± 0.081	0.184 ± 0.103	0.169 ± 0.084
yeast6	0.032 ± 0.002	0.035 ± 0.005	$0.050 \overset{1,2}{\pm} 0.018$	0.238 ± 0.038	0.235 ± 0.040	0.124 ± 0.093	$0.156 \overset{1,2}{\pm} 0.096$
ecoli-0-6-7-vs-5	0.597 ± 0.279	$0.402 \stackrel{1}{\pm} 0.181$	$0.590 \stackrel{1,2}{\pm} 0.241$	$0.745 \stackrel{all}{\pm} 0.196$	0.715 ± 0.193	0.589 ± 0.270	0.476 ± 0.228
$glass\hbox{-} 0\hbox{-} 1\hbox{-} 6\hbox{-} vs\hbox{-} 5$	0.756 ± 0.272	0.797 ± 0.285	0.797 ± 0.285	0.827 ± 0.286	0.827 ± 0.286	0.827 ± 0.286	0.820 ± 0.286
ecoli-0-1-3-7-vs-2-6	0.353 ± 0.279	0.570 ± 0.372	0.610 ± 0.389	0.733 ± 0.401	0.672 ± 0.397	0.478 ± 0.349	0.463 ± 0.355
yeast - 0 - 2 - 5 - 6 - vs - 3 - 7 - 8 - 9	0.643 ± 0.115	0.611 ± 0.079	0.616 ± 0.089	0.719 ± 0.111	0.682 ± 0.092	$0.627 \stackrel{1}{\pm} 0.144$	$0.529 \stackrel{1}{\pm} 0.116$
ecoli-0-1-4-7-vs-5-6	0.838 ± 0.239	0.686 ± 0.243	0.763 ± 0.213	0.876 ± 0.181	0.832 ± 0.194	0.665 ± 0.191	0.533 ± 0.179
yeast5	0.082 ± 0.011	0.073 ± 0.013	0.092 ± 0.017	$2,3,5,6,7 \\ 0.448 \pm 0.068$	0.448 ± 0.068	0.378 ± 0.159	0.395 ± 0.148
shuttle- $c2$ - vs - $c4$	0.840 ± 0.277	0.872 ± 0.320	0.875 ± 0.316	0.820 ± 0.384	0.840 ± 0.366	0.707 ± 0.392	0.763 ± 0.375
ecoli - 0 - 1 - 4 - 7 - vs - 2 - 3 - 5 - 6	0.778 ± 0.304	0.757 ± 0.319	0.812 ± 0.252	0.855 ± 0.289	0.910 ± 0.160	0.836 ± 0.226	0.609 ± 0.249
yeast - 0 - 3 - 5 - 9 - vs - 7 - 8	0.109 ± 0.003	0.122 ± 0.082	$0.207 \stackrel{7}{\pm} 0.152$	0.341 ± 0.177	0.309 ± 0.153	0.181 ± 0.127	0.169 ± 0.067
yeast-1- vs -7	0.080 ± 0.006	0.078 ± 0.008	0.110 ± 0.042	0.149 ± 0.053	0.141 ± 0.041	0.089 ± 0.031	0.094 ± 0.031
yeast-1-2-8-9- vs -7	0.034 ± 0.000	0.034 ± 0.001	0.037 ± 0.004	0.102 ± 0.035	0.102 ± 0.035	0.057 ± 0.034	0.066 ± 0.038
ecoli- 0 - 1 - 4 - 6 - vs - 5	0.624 ± 0.271	0.530 ± 0.214	0.661 ± 0.236	0.833 ± 0.157	0.804 ± 0.161	0.650 ± 0.250	0.579 ± 0.271
$glass\hbox{-}0\hbox{-}1\hbox{-}5\hbox{-}vs\hbox{-}2$	0.119 ± 0.052	0.105 ± 0.034	0.132 ± 0.075	0.189 ± 0.068	0.194 ± 0.068	0.110 ± 0.024	0.110 ± 0.022
yeast-2- vs -4	$0.235 \stackrel{?}{\pm} 0.270$	0.134 ± 0.103	0.400 ± 0.242	0.708 ± 0.169	0.649 ± 0.136	0.379 ± 0.271 $1,2,7$	0.333 ± 0.206
$glass\hbox{-} 0\hbox{-} 6\hbox{-} vs\hbox{-} 5$	0.853 ± 0.284	0.887 ± 0.254	0.887 ± 0.254	0.880 ± 0.324	0.880 ± 0.324	0.873 ± 0.325	$0.873 \stackrel{2}{\pm} 0.325$
glass2	0.106 ± 0.029	0.110 ± 0.028	0.112 ± 0.040	0.199 ± 0.077	0.210 ± 0.084	0.114 ± 0.032	0.114 ± 0.032
yeast-2- vs -8	0.171 ± 0.241	0.145 ± 0.199	0.309 ± 0.236	0.822 ± 0.253	0.735 ± 0.253	0.418 ± 0.386 $1,2,7$	$0.115 \stackrel{6}{\pm} 0.101$
vowel0	0.610 ± 0.063 $2.3,6.7$	0.432 ± 0.038	0.474 ± 0.040 2.7	0.836 ± 0.081	0.751 ± 0.069	0.527 ± 0.056 $2.3.7$	0.421 ± 0.034
glass - 0 - 4 - vs - 5	0.913 ± 0.195	0.913 ± 0.195	0.913 ± 0.195	0.980 ± 0.139 $1,2,3$	$ \begin{array}{c} 1,2,3,6,7\\0.980 \pm 0.139\\\\1,2,3 \end{array} $	0.980 ± 0.139 $1,2,3$	0.980 ± 0.139 $1,2,3$
$glass\hbox{-}0\hbox{-}1\hbox{-}4\hbox{-}6\hbox{-}vs\hbox{-}2$	0.101 ± 0.034	0.103 ± 0.032	0.107 ± 0.043 $1,2$	0.186 ± 0.070 $1,2,3,6,7$	0.198 ± 0.065 $1,2,3,6,7$	0.118 ± 0.033	0.124 ± 0.041
yeast4	0.038 ± 0.003	0.037 ± 0.002	0.039 ± 0.004 $1,2$	0.210 ± 0.036 $1,2,3,6,7$	0.209 ± 0.037 $1,2,3,6,7$	0.092 ± 0.081	0.102 ± 0.085 $2,6$
ecoli-0-4-6- vs -5	0.621 ± 0.241	0.545 ± 0.190	0.695 ± 0.244 $1,2,7$	0.755 ± 0.177 $1,2,3,6,7$	$0.740 \pm 0.178 \\ 1,2,6,7$	0.653 ± 0.214 $2,7$	0.615 ± 0.221
page-blocks-1-3-vs-4	0.468 ± 0.156	0.431 ± 0.159	0.465 ± 0.159	0.570 ± 0.174	0.552 ± 0.169	0.511 ± 0.157	0.452 ± 0.158
yeast - 0 - 2 - 5 - 7 - 9 - vs - 3 - 6 - 8	$0.115 \stackrel{?}{\pm} 0.007$	0.112 ± 0.045	0.213 ± 0.188 1.2	0.529 ± 0.147	0.496 ± 0.121	0.245 ± 0.200 $1,2$	$0.371 \stackrel{?}{\pm} 0.162$ 1.2.3.6
ecoli- 0 - 1 - vs - 2 - 3 - 5	0.433 ± 0.470	0.406 ± 0.459	0.791 ± 0.371	0.793 ± 0.399	0.830 ± 0.365 1.2	0.859 ± 0.281 $1,2,7$	0.812 ± 0.247 $1,2$
ecoli-0-6-7- vs -3-5	0.219 ± 0.313	0.290 ± 0.305	0.285 ± 0.305	0.355 ± 0.426	0.736 ± 0.335	0.416 ± 0.356	0.519 ± 0.344 $1,2,3$
ecoli-0-3-4-7- vs -5-6	0.326 ± 0.160	0.486 ± 0.199	0.658 ± 0.181	0.745 ± 0.149 $1,2,3,6,7$	0.731 ± 0.145	0.484 ± 0.215	0.438 ± 0.211
$ecoli\mbox{-}0\mbox{-}2\mbox{-}6\mbox{-}7\mbox{-}vs\mbox{-}3\mbox{-}5$	0.266 ± 0.354	0.329 ± 0.326	0.388 ± 0.342	0.436 ± 0.434	0.773 ± 0.263 all	0.441 ± 0.344	0.538 ± 0.326
$shuttle\hbox{-} c0\hbox{-} vs\hbox{-} c4$	0.976 ± 0.038	0.974 ± 0.037	0.974 ± 0.037	$1.000 \stackrel{1}{\pm} 0.000$ $1,2,3$	$1.000 \stackrel{att}{\pm} 0.000$ $1,2,3$	0.999 ± 0.005 $1,2,3$	0.999 ± 0.005 $1,2,3$
ecoli-0-3-4- vs -5	0.335 ± 0.202	0.385 ± 0.225	0.663 ± 0.220	0.790 ± 0.177	0.786 ± 0.175	0.540 ± 0.286	0.440 ± 0.278
	_	1	1,2,6,7	1,2,3,6,7	1,2,3,6,7	1,2,7	_

Table 5: Results for Precision metric

	GNB (1) OSB (2) OKNORAU (3) TBAC (4) OTBAC (5) TBAW (6) OTBAW (7)									
Mean rank	2.244	2.098	3.902	6.341	6.098	3.976	3.341			
	_	_	1,2	1,2,3,6,7	1,2,3,6,7	1,2,7	1,2			

Table 6: Results for mean ranks according to Precision metric

Dataset	GNB (1)	OSB (2)	OKNORAU (3)	TBAC (4)	OTBAC (5)	TBAW (6)	OTBAW (7)
glass4	0.210 ± 0.244	0.653 ± 0.270	0.633 ± 0.272	0.583 ± 0.320	0.670 ± 0.313	0.613 ± 0.267	0.677 ± 0.259
ecoli- 0 - 2 - 3 - 4 - vs - 5	0.830 ± 0.153	0.795 ± 0.198	0.835 ± 0.146	0.835 ± 0.155	0.835 ± 0.155	0.850 ± 0.158	0.845 ± 0.165
glass-0-1-6-vs-2	0.737 ± 0.215	0.845 ± 0.192	0.742 ± 0.242	0.700 ± 0.236	0.723 ± 0.216	0.862 ± 0.203	0.873 ± 0.196
ecoli-0-1- vs -5	0.620 ± 0.279	0.680 ± 0.304	0.795 ± 0.178	0.790 ± 0.160	0.795 ± 0.163	0.800 ± 0.158	0.795 ± 0.155
yeast-1-4-5-8-vs-7	1.000 ± 0.000	$0.990 \stackrel{1}{\pm} 0.051$	0.933 ± 0.105	0.513 ± 0.193	0.513 ± 0.193	0.787 ± 0.253	0.760 ± 0.254
ecoli4	$3,4,5,6,7 \\ 0.940 \pm 0.106$	$3,4,5,6,7 \\ 0.945 \pm 0.103$	0.920 ± 0.116	0.890 ± 0.159	0.900 ± 0.158	0.930 ± 0.150	0.930 ± 0.150
led7digit - 0 - 2 - 4 - 5 - 6 - 7 - 8 - 9 - vs - 1	$0.816 \stackrel{4}{\pm} 0.137$	$0.845 \overset{4,5}{\pm} 0.118$	0.836 ± 0.127	0.342 ± 0.177	0.342 ± 0.177	0.859 ± 0.221	0.862 ± 0.221
glass5	0.920 ± 0.208	$0.850 \overset{4,5}{\pm} 0.304$	0.850 ± 0.304	0.820 ± 0.312	0.820 ± 0.312	0.820 ± 0.312	0.820 ± 0.312
ecoli-0-3-4-6- vs -5	0.840 ± 0.171	0.855 ± 0.166	0.850 ± 0.173	0.835 ± 0.170	0.840 ± 0.171	0.845 ± 0.172	0.850 ± 0.173
yeast - 0 - 5 - 6 - 7 - 9 - vs - 4	0.969 ± 0.045	0.981 ± 0.038	0.931 ± 0.084	0.785 ± 0.125	0.817 ± 0.102	0.898 ± 0.130	0.924 ± 0.115
yeast6	$\begin{array}{c} 3,4,5,6,7 \\ 0.986 \pm 0.042 \end{array}$	0.977 ± 0.087	0.940 ± 0.107	$0.837 \stackrel{-}{\pm} 0.117$	0.837 ± 0.117	0.929 ± 0.100	0.911 ± 0.102
ecoli-0-6-7-vs-5	$3,4,5,6,7 \\ 0.720 \pm 0.210$	0.835 ± 0.177	0.825 ± 0.182	0.770 ± 0.179	0.785 ± 0.187	0.795 ± 0.184	0.815 ± 0.192
glass-0-1-6-vs-5	0.930 ± 0.223	0.850 ± 0.287	0.850 ± 0.287	0.780 ± 0.302	0.780 ± 0.302	$0.780 \stackrel{1}{\pm} 0.302$	0.780 ± 0.302
ecoli-0-1-3-7-vs-2-6	0.700 ± 0.400	0.700 ± 0.400	0.700 ± 0.400	0.700 ± 0.400	0.700 ± 0.400	0.680 ± 0.409	0.700 ± 0.400
yeast - 0 - 2 - 5 - 6 - vs - 3 - 7 - 8 - 9	0.372 ± 0.096	0.574 ± 0.120	0.579 ± 0.096	0.405 ± 0.112	0.574 ± 0.107	0.508 ± 0.135	0.661 ± 0.109
ecoli-0-1-4-7-vs-5-6	0.492 ± 0.259	0.660 ± 0.266	0.748 ± 0.222	$0.684 \stackrel{1}{\pm} 0.208$	0.756 ± 0.208	0.688 ± 0.170	$0.852 \stackrel{all}{\pm} 0.153$
yeast5	0.996 ± 0.031	$0.993 \stackrel{1}{\pm} 0.034$	0.993 ± 0.034	$0.989 \stackrel{1}{\pm} 0.040$	0.991 ± 0.037	$0.991 \stackrel{1}{\pm} 0.037$	$0.993 \stackrel{all}{\pm} 0.034$
shuttle- $c2$ - vs - $c4$	1.000 ± 0.000	0.880 ± 0.309	0.880 ± 0.309	0.810 ± 0.385	0.820 ± 0.370	0.810 ± 0.385	0.820 ± 0.370
ecoli-0-1-4-7-vs-2-3-5-6	0.308 ± 0.178	0.330 ± 0.241	0.435 ± 0.255	0.381 ± 0.236	0.543 ± 0.258	0.459 ± 0.235	0.613 ± 0.241
yeast - 0 - 3 - 5 - 9 - vs - 7 - 8	0.992 ± 0.033	0.944 ± 0.151	0.740 ± 0.279	0.568 ± 0.237	0.586 ± 0.227	0.800 ± 0.246	0.822 ± 0.165
yeast-1-vs-7	0.973 ± 0.077	$3,4,5,6,7 \\ 0.910 \pm 0.142$	0.783 ± 0.211	0.613 ± 0.203	0.610 ± 0.201	0.890 ± 0.158	0.880 ± 0.176
yeast-1-2-8-9- vs -7	1.000 ± 0.000	0.977 ± 0.074	0.933 ± 0.120	0.527 ± 0.177	0.527 ± 0.177	0.803 ± 0.270	0.757 ± 0.279
ecoli-0-1-4-6- vs -5	0.750 ± 0.173	0.840 ± 0.156	0.830 ± 0.169	0.815 ± 0.164	0.830 ± 0.161	0.830 ± 0.161	0.840 ± 0.147
$glass\hbox{-} 0\hbox{-} 1\hbox{-} 5\hbox{-} vs\hbox{-} 2$	0.675 ± 0.253	$0.750 \stackrel{1}{\pm} 0.234$	$0.680 \stackrel{1}{\pm} 0.256$	$0.695 \stackrel{1}{\pm} 0.242$	$0.732 \stackrel{1}{\pm} 0.242$	$0.850 \stackrel{1}{\pm} 0.210$	$0.877 \stackrel{1}{\pm} 0.206$
yeast-2-vs-4	0.921 ± 0.100	0.958 ± 0.061	0.863 ± 0.112	0.779 ± 0.137	0.794 ± 0.124	0.869 ± 0.135	0.886 ± 0.116
$glass\hbox{-} 0\hbox{-} 6\hbox{-} vs\hbox{-} 5$	0.900 ± 0.282	0.880 ± 0.274	0.880 ± 0.274	0.750 ± 0.350	0.750 ± 0.350	0.750 ± 0.350	0.750 ± 0.350
glass2	0.773 ± 0.200	0.825 ± 0.192	0.737 ± 0.242	0.683 ± 0.222	0.725 ± 0.216	0.885 ± 0.176	0.902 ± 0.159
yeast-2-vs-8	$0.890 \stackrel{4}{\pm} 0.218$	0.870 ± 0.207	0.690 ± 0.221	0.575 ± 0.225	0.615 ± 0.213	0.725 ± 0.246	0.765 ± 0.231
vowel0	0.889 ± 0.081	0.929 ± 0.059	0.938 ± 0.057	0.790 ± 0.119	0.891 ± 0.096	0.904 ± 0.069	0.958 ± 0.053
$glass\hbox{-} 0\hbox{-} 4\hbox{-} vs\hbox{-} 5$	0.960 ± 0.168	0.890 ± 0.229	0.890 ± 0.229	0.870 ± 0.241	$0.880 \stackrel{4}{\pm} 0.235$	$0.870 \stackrel{4}{\pm} 0.241$	0.880 ± 0.235
$glass\hbox{-} 0\hbox{-} 1\hbox{-} 4\hbox{-} 6\hbox{-} vs\hbox{-} 2$	0.745 ± 0.267	0.797 ± 0.270	0.738 ± 0.293	0.660 ± 0.232	0.717 ± 0.199	0.880 ± 0.175	0.898 ± 0.163
yeast4	$0.961 \stackrel{4}{\pm} 0.057$	0.971 ± 0.052	0.951 ± 0.065	0.718 ± 0.137	0.722 ± 0.132	0.899 ± 0.148	0.885 ± 0.158
ecoli-0-4-6- vs -5	0.780 ± 0.184	0.850 ± 0.158	0.845 ± 0.165	0.835 ± 0.155	0.835 ± 0.155	0.840 ± 0.156	0.850 ± 0.141
page-blocks-1-3-vs-4	0.576 ± 0.190	0.608 ± 0.210	0.685 ± 0.257	0.537 ± 0.182	0.591 ± 0.215	0.562 ± 0.194	0.593 ± 0.202
yeast - 0 - 2 - 5 - 7 - 9 - vs - 3 - 6 - 8	$0.986 \stackrel{4}{\pm} 0.031$	0.989 ± 0.027	0.953 ± 0.082	0.870 ± 0.079	$0.882 \stackrel{4}{\pm} 0.081$	0.946 ± 0.061	$0.905 \stackrel{4}{\pm} 0.070$
ecoli- 0 - 1 - vs - 2 - 3 - 5	0.218 ± 0.314	0.215 ± 0.313	0.509 ± 0.321	0.438 ± 0.272	0.557 ± 0.319	0.516 ± 0.267	0.644 ± 0.261
ecoli-0-6-7-vs-3-5	0.199 ± 0.320	0.270 ± 0.349	0.266 ± 0.351	0.185 ± 0.247	0.370 ± 0.250	0.284 ± 0.292	0.362 ± 0.298
ecoli-0-3-4-7-vs-5-6	0.792 ± 0.236	0.784 ± 0.270	0.832 ± 0.166	0.776 ± 0.163	0.804 ± 0.157	0.832 ± 0.197	0.880 ± 0.154
ecoli - 0 - 2 - 6 - 7 - vs - 3 - 5	0.199 ± 0.290	0.266 ± 0.325	$0.282 \stackrel{4}{\pm} 0.315$	0.209 ± 0.240	0.400 ± 0.223	$0.286 \stackrel{4}{\pm} 0.263$	0.379 ± 0.276
shuttle-c0-vs-c4	0.982 ± 0.025	$0.980 \stackrel{1}{\pm} 0.025$	0.980 ± 0.025	0.983 ± 0.025	0.983 ± 0.025	0.983 ± 0.025	0.983 ± 0.025
ecoli- 0 - 3 - 4 - vs - 5	0.845 ± 0.186	0.820 ± 0.234	0.845 ± 0.205	0.845 ± 0.205	0.845 ± 0.205	0.855 ± 0.200	0.855 ± 0.200

Table 7: Results for Recall metric

	GNB (1) OSB (2) OKNORAU (3) TBAC (4) OTBAC (5) TBAW (6) OTBAW (7)									
Mean rank	4.037	4.890	4.427	1.939	3.305	4.183	5.220			
	4	4,5	4,5	_	4	4,5	1,3,4,5,6			

Table 8: Results for mean ranks according to Recall metric

Dataset	GNB (1)	OSB (2)	OKNORAU (3)	TBAC (4)	OTBAC (5)	TBAW (6)	OTBAW (7)
glass4	0.572 ± 0.129	0.771 ± 0.138	0.778 ± 0.139	0.765 ± 0.161	0.806 ± 0.159	0.687 ± 0.165	0.657 ± 0.164
ecoli- 0 - 2 - 3 - 4 - vs - 5	0.780 ± 0.098	0.777 ± 0.117	0.873 ± 0.092	0.902 ± 0.077	0.900 ± 0.078	0.864 ± 0.095	0.838 ± 0.107
$glass\hbox{-} 0\hbox{-} 1\hbox{-} 6\hbox{-} vs\hbox{-} 2$	0.565 ± 0.111	0.593 ± 0.096	0.587 ± 0.128	0.698 ± 0.127	0.709 ± 0.115	0.604 ± 0.084	0.612 ± 0.082
ecoli-0-1- vs -5	$0.800 \stackrel{-}{\pm} 0.143$	0.830 ± 0.152	$0.891 \stackrel{1}{\pm} 0.088$	0.893 ± 0.080	0.895 ± 0.082	$0.896 \stackrel{1}{\pm} 0.079$	0.891 ± 0.080
yeast-1-4-5-8- vs -7	0.544 ± 0.012	$0.544 \stackrel{1}{\pm} 0.022$	0.574 ± 0.045	0.629 ± 0.098	0.628 ± 0.098	0.591 ± 0.071	0.594 ± 0.072
ecoli4	0.886 ± 0.083	0.891 ± 0.068	0.922 ± 0.079	0.933 ± 0.082	0.934 ± 0.080	0.899 ± 0.075	0.887 ± 0.078
$led 7 digit \hbox{-} 0 \hbox{-} 2 \hbox{-} 4 \hbox{-} 5 \hbox{-} 6 \hbox{-} 7 \hbox{-} 8 \hbox{-} 9 \hbox{-} vs \hbox{-} 1$	0.853 ± 0.073	0.859 ± 0.067	0.876 ± 0.070	0.654 ± 0.090	0.653 ± 0.090	$0.843 \stackrel{7}{\pm} 0.103$	0.839 ± 0.096
glass5	0.948 ± 0.103	0.915 ± 0.149	0.915 ± 0.149	0.908 ± 0.155	0.908 ± 0.155	0.908 ± 0.154	0.908 ± 0.154
ecoli- 0 - 3 - 4 - 6 - vs - 5	0.755 ± 0.102	0.797 ± 0.121	0.884 ± 0.110	0.898 ± 0.090	0.900 ± 0.090	0.851 ± 0.109	0.821 ± 0.117
yeast - 0 - 5 - 6 - 7 - 9 - vs - 4	0.501 ± 0.026	0.502 ± 0.022	0.612 ± 0.146	0.794 ± 0.049	0.805 ± 0.049	0.635 ± 0.134	0.632 ± 0.132
yeast6	0.636 ± 0.023	0.653 ± 0.044	$0.722 \stackrel{1,2}{\pm} 0.072$	0.885 ± 0.056	0.885 ± 0.056	0.798 ± 0.102	0.833 ± 0.090
ecoli-0-6-7-vs-5	0.813 ± 0.124	$0.834 \stackrel{1}{\pm} 0.111$	$0.870 \stackrel{1,2}{\pm} 0.112$	$0.869 \stackrel{all}{\pm} 0.093$	0.874 ± 0.096	0.849 ± 0.100	0.838 ± 0.103
$glass\hbox{-}0\hbox{-}1\hbox{-}6\hbox{-}vs\hbox{-}5$	0.956 ± 0.109	0.920 ± 0.142	0.920 ± 0.142	0.886 ± 0.150	0.886 ± 0.150	0.886 ± 0.150	0.886 ± 0.150
ecoli - 0 - 1 - 3 - 7 - vs - 2 - 6	0.831 ± 0.193	0.844 ± 0.198	0.845 ± 0.199	0.847 ± 0.203	0.844 ± 0.203	0.828 ± 0.204	0.835 ± 0.197
$yeast \hbox{-} 0 \hbox{-} 2 \hbox{-} 5 \hbox{-} 6 \hbox{-} vs \hbox{-} 3 \hbox{-} 7 \hbox{-} 8 \hbox{-} 9$	$0.675 \stackrel{6}{\pm} 0.048$	0.767 ± 0.058	0.769 ± 0.048	0.694 ± 0.056	0.772 ± 0.053	0.723 ± 0.061	0.782 ± 0.071
ecoli - 0 - 1 - 4 - 7 - vs - 5 - 6	0.742 ± 0.131	0.816 ± 0.131	0.862 ± 0.112	0.838 ± 0.104	0.871 ± 0.104	0.826 ± 0.085	0.886 ± 0.075
yeast5	0.825 ± 0.024	$0.798 \stackrel{1}{\pm} 0.035$	0.841 ± 0.029	0.975 ± 0.021	0.976 ± 0.020	0.947 ± 0.063	0.950 ± 0.070
shuttle- $c2$ - vs - $c4$	0.988 ± 0.022	0.937 ± 0.154	0.938 ± 0.154	0.905 ± 0.192	0.910 ± 0.185	0.899 ± 0.192	0.906 ± 0.184
ecoli - 0 - 1 - 4 - 7 - vs - 2 - 3 - 5 - 6	0.651 ± 0.090	0.661 ± 0.120	0.713 ± 0.126	0.689 ± 0.118	0.769 ± 0.129	0.725 ± 0.117	0.777 ± 0.111
yeast - 0 - 3 - 5 - 9 - vs - 7 - 8	0.550 ± 0.018	0.545 ± 0.037	0.606 ± 0.084	0.695 ± 0.073	0.698 ± 0.075	0.612 ± 0.084	0.639 ± 0.089
yeast-1- vs -7	0.594 ± 0.037	0.581 ± 0.047	0.648 ± 0.094	0.680 ± 0.100	0.674 ± 0.096	0.606 ± 0.073	0.616 ± 0.078
yeast-1-2-8-9-vs-7	0.540 ± 0.011	0.538 ± 0.024	0.573 ± 0.054	0.687 ± 0.090	0.687 ± 0.089	0.611 ± 0.068	0.630 ± 0.075
ecoli- 0 - 1 - 4 - 6 - vs - 5	0.847 ± 0.098	0.881 ± 0.088	0.892 ± 0.090	0.899 ± 0.080	0.905 ± 0.078	0.887 ± 0.085	0.876 ± 0.090
$glass\hbox{-} 0\hbox{-} 1\hbox{-} 5\hbox{-} vs\hbox{-} 2$	0.555 ± 0.134	0.527 ± 0.112	0.578 ± 0.135	0.685 ± 0.115	0.700 ± 0.117	0.551 ± 0.073	0.555 ± 0.069
yeast-2-vs-4	0.608 ± 0.128	0.556 ± 0.098	0.750 ± 0.171	0.868 ± 0.066	0.870 ± 0.060	0.728 ± 0.160	0.733 ± 0.161
glass-0-6-vs-5	$0.945 \stackrel{2}{\pm} 0.140$	0.936 ± 0.136	0.936 ± 0.136	0.875 ± 0.175	0.875 ± 0.175	0.875 ± 0.174	0.875 ± 0.174
glass2	0.607 ± 0.098	0.624 ± 0.094	0.614 ± 0.124	0.718 ± 0.115	0.738 ± 0.116 $1.2.3.6.7$	0.640 ± 0.094	0.643 ± 0.090
yeast-2-vs-8	0.637 ± 0.090	0.640 ± 0.096	0.765 ± 0.086	0.782 ± 0.111	0.799 ± 0.105	0.706 ± 0.116	0.688 ± 0.081
vowel0	0.915 ± 0.037	0.902 ± 0.026	0.916 ± 0.025	0.887 ± 0.058	0.930 ± 0.048	0.911 ± 0.033	0.912 ± 0.024
$glass\hbox{-}0\hbox{-}4\hbox{-}vs\hbox{-}5$	0.975 ± 0.083	0.940 ± 0.112	0.940 ± 0.112	0.935 ± 0.120	0.940 ± 0.117	0.935 ± 0.120	$0.940 \overset{2,4}{\pm} 0.117$
$glass\hbox{-} 0\hbox{-} 1\hbox{-} 4\hbox{-} 6\hbox{-} vs\hbox{-} 2$	0.579 ± 0.128	0.592 ± 0.131	0.594 ± 0.146	0.695 ± 0.118	0.721 ± 0.106	0.634 ± 0.089	0.645 ± 0.084
yeast4	0.551 ± 0.039	0.530 ± 0.030	0.561 ± 0.047	0.810 ± 0.065	0.812 ± 0.064	0.623 ± 0.131	0.633 ± 0.140
ecoli-0-4- 6 - vs - 5	$0.851 \stackrel{?}{\pm} 0.114$	0.873 ± 0.107	0.892 ± 0.101	0.901 ± 0.083	0.899 ± 0.083	0.888 ± 0.093	0.883 ± 0.095
page-blocks-1-3-vs-4	0.765 ± 0.095	0.776 ± 0.104	0.817 ± 0.127	0.754 ± 0.092	0.779 ± 0.108	0.763 ± 0.095	0.770 ± 0.094
$yeast\hbox{-} 0\hbox{-} 2\hbox{-} 5\hbox{-} 7\hbox{-} 9\hbox{-} vs\hbox{-} 3\hbox{-} 6\hbox{-} 8$	0.576 ± 0.028	0.541 ± 0.052	0.641 ± 0.131	0.886 ± 0.032	0.886 ± 0.033	0.692 ± 0.141	0.800 ± 0.143
ecoli-0-1-vs-2-3-5	0.607 ± 0.157	0.605 ± 0.156	0.752 ± 0.163	0.719 ± 0.136	0.778 ± 0.159	0.752 ± 0.134	0.812 ± 0.132
ecoli-0-6-7-vs-3-5	0.587 ± 0.158	0.620 ± 0.167	0.618 ± 0.168	0.586 ± 0.121	0.677 ± 0.122	0.629 ± 0.138	0.663 ± 0.134
ecoli-0-3-4-7-vs-5-6	0.778 ± 0.080	0.833 ± 0.127	0.885 ± 0.084	0.872 ± 0.080	0.884 ± 0.077	0.842 ± 0.090	0.840 ± 0.098
ecoli - 0 - 2 - 6 - 7 - vs - 3 - 5	0.586 ± 0.145	0.617 ± 0.158	0.626 ± 0.154	0.599 ± 0.118	0.693 ± 0.108	0.627 ± 0.124	0.668 ± 0.128
shuttle-c0-vs-c4	0.990 ± 0.012	0.989 ± 0.012	0.989 ± 0.012	0.991 ± 0.012	0.991 ± 0.012	0.991 ± 0.012	0.991 ± 0.012
ecoli-0-3-4- vs -5	0.788 ± 0.105	0.803 ± 0.128	0.890 ± 0.109	0.908 ± 0.105	0.908 ± 0.105	0.847 ± 0.120	0.814 ± 0.123
	<u> </u>	_	1,2,6,7	1,2,3,6,7	1,2,3,6,7	1,2,7	l –

Table 9: Results for AUC metric

	GNB (1) OSB (2) OKNORAU (3) TBAC (4) OTBAC (5) TBAW (6) OTBAW (7)									
Mean rank	2.341	2.622	4.427	4.829	6.073	3.610	4.098			
	_	_	1,2,6	1,2,6	all	1,2	1,2			

Table 10: Results for mean ranks according to AUC metric

Dataset	GNB (1)	OSB (2)	OKNORAU (3)	TBAC (4)	OTBAC (5)	TBAW (6)	OTBAW (7)
glass4	0.304 ± 0.325	0.733 ± 0.206	0.735 ± 0.209	0.684 ± 0.291	0.749 ± 0.264	0.656 ± 0.193	0.619 ± 0.207
ecoli-0-2-3-4-vs-5	0.768 ± 0.100	0.755 ± 0.135	0.868 ± 0.096	0.896 ± 0.086	0.893 ± 0.086	0.854 ± 0.105	0.822 ± 0.122
glass-0-1-6-vs-2	0.524 ± 0.114	$0.528 \stackrel{-}{\pm} 0.079$	0.545 ± 0.147	0.682 ± 0.155	0.699 ± 0.121	0.525 ± 0.081	0.529 ± 0.086
ecoli-0-1- vs -5	0.725 ± 0.286	$0.764 \stackrel{6}{\pm} 0.285$	0.880 ± 0.102	0.882 ± 0.092	0.885 ± 0.094	0.886 ± 0.090	0.882 ± 0.090
yeast-1-4-5-8-vs-7	0.293 ± 0.044	$0.304 \stackrel{1}{\pm} 0.062$	0.438 ± 0.065	0.601 ± 0.142	0.601 ± 0.142	0.488 ± 0.132	0.498 ± 0.138
ecoli4	0.883 ± 0.085	0.888 ± 0.068	0.920 ± 0.080	0.927 ± 0.091	0.929 ± 0.089	0.891 ± 0.085	0.876 ± 0.089
led7 digit - 0 - 2 - 4 - 5 - 6 - 7 - 8 - 9 - vs - 1	0.849 ± 0.077	0.856 ± 0.068	0.872 ± 0.073	0.547 ± 0.177	0.546 ± 0.177	$0.822 \stackrel{7}{\pm} 0.162$	0.818 ± 0.154
glass5	0.933 ± 0.163	0.870 ± 0.275	0.870 ± 0.275	0.859 ± 0.278	0.859 ± 0.278	0.859 ± 0.278	0.859 ± 0.278
ecoli-0-3-4-6- vs -5	0.735 ± 0.109	0.783 ± 0.131	0.879 ± 0.115	0.891 ± 0.100	0.893 ± 0.099	0.841 ± 0.117	0.805 ± 0.131
yeast-0-5-6-7-9-vs-4	0.164 ± 0.068	0.136 ± 0.064	0.416 ± 0.281	0.789 ± 0.051	0.802 ± 0.048	0.457 ± 0.289	0.444 ± 0.291
yeast6	$0.529 \stackrel{2}{\pm} 0.045$	0.558 ± 0.074	0.673 ± 0.106	0.881 ± 0.061	0.881 ± 0.061	$0.765 \overset{1,2}{\pm} 0.135$	0.813 ± 0.114
ecoli-0-6-7- vs -5	0.796 ± 0.145	$0.828 \stackrel{1}{\pm} 0.115$	0.864 ± 0.119	$0.857 \stackrel{all}{\pm} 0.105$	0.863 ± 0.109	0.839 ± 0.108	0.828 ± 0.112
$glass\hbox{-} 0\hbox{-} 1\hbox{-} 6\hbox{-} vs\hbox{-} 5$	0.933 ± 0.202	0.882 ± 0.248	0.882 ± 0.248	0.843 ± 0.251	0.843 ± 0.251	0.843 ± 0.251	0.842 ± 0.251
ecoli - 0 - 1 - 3 - 7 - vs - 2 - 6	0.725 ± 0.377	0.737 ± 0.385	$0.737 \stackrel{-}{\pm} 0.385$	0.740 ± 0.387	0.739 ± 0.386	0.713 ± 0.394	0.730 ± 0.380
yeast - 0 - 2 - 5 - 6 - vs - 3 - 7 - 8 - 9	0.598 ± 0.077	0.737 ± 0.082	0.743 ± 0.062	0.624 ± 0.090	0.743 ± 0.071	0.672 ± 0.097	$0.757 \stackrel{1}{\pm} 0.116$
ecoli - 0 - 1 - 4 - 7 - vs - 5 - 6	0.669 ± 0.203	0.774 ± 0.201	0.843 ± 0.143	$0.807 \stackrel{1}{\pm} 0.165$	0.847 ± 0.166	0.808 ± 0.102	$0.880 \stackrel{all}{\pm} 0.084$
yeast5	0.807 ± 0.028	0.772 ± 0.046	0.826 ± 0.034	0.975 ± 0.022	0.976 ± 0.020	0.943 ± 0.071	0.945 ± 0.082
shuttle-c2-vs-c4	0.988 ± 0.023	0.885 ± 0.300	0.886 ± 0.300	0.814 ± 0.383	0.828 ± 0.365	0.809 ± 0.381	0.825 ± 0.364
ecoli - 0 - 1 - 4 - 7 - vs - 2 - 3 - 5 - 6	0.517 ± 0.198	0.522 ± 0.235	$0.620 \stackrel{6}{\pm} 0.215$	0.573 ± 0.228	$0.711 \stackrel{6}{\pm} 0.187$	$0.647 \stackrel{-}{\pm} 0.191$	0.740 ± 0.153
$yeast\hbox{-}0\hbox{-}3\hbox{-}5\hbox{-}9\hbox{-}vs\hbox{-}7\hbox{-}8$	0.324 ± 0.051	0.317 ± 0.108	0.484 ± 0.157	0.651 ± 0.136	0.660 ± 0.134	0.499 ± 0.161	0.558 ± 0.166
yeast-1-vs-7	0.452 ± 0.051	0.461 ± 0.074	$0.600 \stackrel{1,2}{\pm} 0.137$	0.665 ± 0.113	0.660 ± 0.109	0.511 ± 0.103	0.522 ± 0.117
$yeast\hbox{-} 1\hbox{-} 2\hbox{-} 8\hbox{-} 9\hbox{-} vs\hbox{-} 7$	0.281 ± 0.039	0.302 ± 0.060	0.437 ± 0.065	0.657 ± 0.119	0.657 ± 0.119	0.492 ± 0.133	0.531 ± 0.136
ecoli-0-1-4-6- vs -5	0.835 ± 0.108	$0.876 \stackrel{1}{\pm} 0.093$	0.885 ± 0.099	0.890 ± 0.091	0.897 ± 0.088	0.880 ± 0.093	0.870 ± 0.095
$glass\hbox{-} 0\hbox{-} 1\hbox{-} 5\hbox{-} vs\hbox{-} 2$	0.518 ± 0.148	0.461 ± 0.103	0.545 ± 0.144	0.665 ± 0.148	0.680 ± 0.147	0.440 ± 0.058	0.427 ± 0.063
yeast-2-vs-4	0.445 ± 0.216	0.326 ± 0.183	0.683 ± 0.255	0.859 ± 0.076	0.864 ± 0.068	0.639 ± 0.262	0.640 ± 0.274
$glass\hbox{-} 0\hbox{-} 6\hbox{-} vs\hbox{-} 5$	$0.903 \stackrel{2}{\pm} 0.272$	0.901 ± 0.246	0.901 ± 0.246	0.804 ± 0.322	0.804 ± 0.322	0.803 ± 0.321	0.803 ± 0.321
glass2	0.570 ± 0.109	0.583 ± 0.079	0.586 ± 0.131	0.700 ± 0.151	0.723 ± 0.150	0.584 ± 0.086	0.583 ± 0.086
yeast-2-vs-8	0.518 ± 0.136	0.539 ± 0.143	0.738 ± 0.112	0.738 ± 0.153	0.764 ± 0.141	0.646 ± 0.153	0.645 ± 0.113
vowel0	0.913 ± 0.040	0.901 ± 0.026	0.915 ± 0.024	0.879 ± 0.067	0.928 ± 0.051	0.910 ± 0.034	0.910 ± 0.023
$glass\hbox{-} 0\hbox{-} 4\hbox{-} vs\hbox{-} 5$	0.963 ± 0.149	0.922 ± 0.171	0.922 ± 0.171	0.916 ± 0.178	0.921 ± 0.176	0.916 ± 0.178	0.921 ± 0.176
$glass\hbox{-} 0\hbox{-} 1\hbox{-} 4\hbox{-} 6\hbox{-} vs\hbox{-} 2$	0.528 ± 0.145	0.534 ± 0.131	0.547 ± 0.164	0.676 ± 0.152	0.712 ± 0.112	0.570 ± 0.096	0.575 ± 0.101
yeast4	0.361 ± 0.067	0.287 ± 0.058	0.395 ± 0.083	0.801 ± 0.079	0.803 ± 0.076	0.440 ± 0.259	0.449 ± 0.281
ecoli-0-4-6- vs -5	0.842 ± 0.122	0.870 ± 0.111	0.887 ± 0.108	0.894 ± 0.090	0.893 ± 0.090	0.884 ± 0.098	0.879 ± 0.099
page-blocks-1-3-vs-4	0.730 ± 0.130	0.745 ± 0.139	0.789 ± 0.164	0.711 ± 0.129	0.742 ± 0.145	0.723 ± 0.132	$0.735 \stackrel{1}{\pm} 0.130$
$yeast \hbox{-} 0 \hbox{-} 2 \hbox{-} 5 \hbox{-} 7 \hbox{-} 9 \hbox{-} vs \hbox{-} 3 \hbox{-} 6 \hbox{-} 8$	0.398 ± 0.065	0.275 ± 0.120	0.495 ± 0.216	0.884 ± 0.034	0.885 ± 0.034	$0.595 \stackrel{4}{\pm} 0.217$	$0.749 \stackrel{6}{\pm} 0.232$
ecoli- 0 - 1 - vs - 2 - 3 - 5	$0.305 \stackrel{2}{\pm} 0.352$	0.296 ± 0.354	0.637 ± 0.320	0.583 ± 0.313	0.672 ± 0.324	0.675 ± 0.233	0.765 ± 0.214
ecoli-0-6-7-vs-3-5	0.258 ± 0.355	0.348 ± 0.368	0.339 ± 0.371	0.275 ± 0.325	0.547 ± 0.253	0.402 ± 0.331	0.499 ± 0.302
ecoli-0-3-4-7-vs-5-6	0.756 ± 0.105	0.804 ± 0.189	$0.877 \stackrel{1}{\pm} 0.094$	0.861 ± 0.091	0.875 ± 0.086	0.828 ± 0.107	0.825 ± 0.120
ecoli-0-2-6-7-vs-3-5	0.278 ± 0.340	$0.364 \stackrel{1}{\pm} 0.348$	0.401 ± 0.331	0.324 ± 0.317	0.595 ± 0.194	0.428 ± 0.299	$0.529 \stackrel{1}{\pm} 0.274$
shuttle-c0-vs-c4	0.990 ± 0.013	0.989 ± 0.013	0.989 ± 0.013	0.991 ± 0.013	0.991 ± 0.013	$0.991 \stackrel{1}{\pm} 0.013$	0.991 ± 0.013
ecoli-0-3-4- vs -5	0.772 ± 0.112	0.779 ± 0.173	$0.880 \stackrel{-}{\pm} 0.127$	0.898 ± 0.126	0.897 ± 0.126	0.830 ± 0.142	0.793 ± 0.147
	<u> </u>	_	1,2,6,7	1,2,3,6,7	1,2,3,6,7	1,2,7	_

Table 11: Results for GMEAN metric

	GNB (1) OSB (2) OKNORAU (3) TBAC (4) OTBAC (5) TBAW (6) OTBAW (7)								
Mean rank	2.341	2.793	4.622	4.829	5.976	3.610	3.829		
	_	_	1,2,6	1,2,6,7	all	1	1,2		

Table 12: Results for mean ranks according to GMEAN metric