



**University of Agriculture, Faisalabad**

**Entry Test for Admission to MS/M.Phil/M.Sc.(Hons)/Ph.D Program**

Dated: 00-00-2021

at 10:00 am

Time: 90 Min

Maximum Marks: 100

**DISCIPLINE: ( )**

**NOTE:** Please solid fill the correct option on the bubble (answer) sheet

**COVID-19 SOPs will follow**

<b>Subject: Epidemiology (1-200)</b>		<b>MCQ's</b>		<b>Answer Key</b>
1)	Which of the following is true about making comparison in epidemiological approach?	A. Both the study and control group should be similar	B. Random allocation is not possible in case of control and cohort study	D
		C. The comparability can be ensured by randomization	D. All of these	
2)	Which of the following epidemiological method uses individual as unit of study	A. Case control study	B. Randomized controlled trials	D
		C. Cross sectional study	D. All of the above	
3)	When a disease frequency is measured over a period of several years of decades, it is called?	A. Seasonal trends	B. Cyclic trends	C
		C. Secular trends	D. None of the above	
4)	'Confounding bias" in case control study can be removed by	A. Matching	B. Double blinding	A
		C. By properly recalling events	D. By selecting representative population	
5)	Experimental epidemiology deals with	A. Epidemics	B. Early Diagnosis	B
		C. Intervention	D. Screening of disease	
6)	To solve engineering problem, we have to formulate the pattern as math expression in terms of variables, functions and equations, such expression is called	A. Functional model	B. Variable model	C
		C. Math model	D. Math equation	
7)	Laplace transformation of function $f(t)=\cos(wt)$ is	A. $s/(s+w)$	B. $s/(s^2+w^2)$	B
		C. $s/(s-w)$	D. $w/(s^2+w^2)$	
8)	Laplace transformation when applied to function, changes that function into new function by using a process that involves	A. Differentiation	B. Binary manipulation	C
		C. Integration	D. Logical manipulation	
9)	The curve of the function i.e. $y=h(X)$ is called	A. Scalar curve	B. Solution curve	B
		C. Separation curve	D. Summation curve	
10)	Mathematical models provide	A. Estimated results	B. Wrong results	A
		C. Accurate results	D. Approximate results	
11)	Scientists used mathematical models to predict the growth of world population, computer converted that data into a	A. Sample	B. Model	B
		C. Design	D. Structure	
12)	Mathematical models allow us to calculate	A. Different quantities	B. Area only	A
		C. Speed only	D. Distance and time	
13)	The purpose is to limit the incidence of disease by controlling causes and risk factors			B

	A. Primordial prevention	B. Primary prevention	
	C. Secondary prevention	D. Tertiary prevention	
14)	The property of a test to identify the proportion of truly ill persons in a population who are identified as ill by a screening test		B
	A. Specificity	B. Sensitivity	
	C. Positive predictive value	D. Negative predictive value	
15)	The probability of a person's having the disease when the test is positive		A
	A. Positive predictive value	B. Sensitivity	
	C. Specificity	D. Negative predictive value	
16)	The extent to which a test is measuring what it is intended to measure		C
	A. Reliability	B. Sensitivity	
	C. Validity	D. Specificity	
17)	Stage by which the presence of factors favors the occurrence of disease		A
	A. Stage of susceptibility	B. Stage of clinical disease	
	C. Stage of pre-symptomatic disease	D. Stage of disability	
18)	Modes of horizontal transmission of disease, except		C
	A. Contact	B. Common Vehicle	
	C. Genetic	D. Vector	
19)	Measures of central tendency, except		B
	A. Mean	B. Variance	
	C. Mode	D. Median	
20)	Range of values surrounding the estimate which has a specified probability of including the true population values		B
	A. Standard deviation	B. Confidence interval	
	C. Standard error	D. Correlation coefficient	
21)	The proportion of disease incidence that can be attributed to a specific exposure		B
	A. Relative risk	B. Attributable risk	
	C. Odds ratio	D. Potential risk	
22)	APGAR family assessment is interpreted by means of		A
	A. Scoring	B. Comparing with a standard table	
	C. Using a scale of wellness	D. Consultation with a family psychologist	
23)	During amniocentesis chromosomal abnormalities of the fetus can be detected by taking the sample of		D
	A. Fetal Blood	B. Body fluid from the mother	
	C. Mothers Blood	D. Fluid surrounding the fetus	
24)	An algorithm used in computer-aided drug discovery is		A
	A. Monte Carlo Simulation	B. Ras Mol	
	C. CATH	D. Chime	
25)	First human EEG was recorded by		B
	A. Purcell	B. Hans Berger	
	C. Jeffrey	D. Einthoven	
26)	Who is considered the father of electrocardiography		D
	A. Jenner	B. Hounsfield	
	C. Purcell	D. Einthovan	
27)	Chi-square is used to analyze		C
	A. Scores	B. Ranks	
	C. Frequencies	D. Any of these	
28)	On which of the following does the critical value for a chi-square statistic rely?		A
	A. The degrees of freedom	B. The sum of the frequencies	
	C. The row totals	D. The number of variables	
29)	Using a goodness-of-fit test, we can assess whether a set of obtained frequencies differ from a set of _____ frequencies		D
	A. Mean	B. Actual	
	C. Predicted	D. Expected	
30)	A researcher asked 933 people what their favorite type of TV program was: news, documentary, soap or sports. They could only choose one answer. As such, the researcher had the number of people who chose each category of program. How should she analyze these data?		C

	A. t-test	B. One-way analysis of variance	
	C. Chi-square test	D. Regression	
31)	Which of the following is not an assumption for binary logistic regression?		A
	A. Normally distributed variables	B. No multicollinearity	
	C. Linearity	D. Independence of observations	
32)	A significant odds ratio of 2.5 for BMI as a continuous predictor of heart disease in a binary logistic model would indicate which of the following?		C
	A. The odds of heart disease increase 2.5% for every 1-point increase in BM	B. Those with heart disease have 2.5 times higher odds of having an increasing BMI compared to those without heart disease.	
	C. The odds of heart disease are 2.5 times higher for every 1-point increase in BMI.	D. There are 2.5 times as many people with heart disease as without among those with higher BMI.	
33)	A confidence interval indicates a significant odds ratio when		C
	A. it includes 1	B. it includes 0	
	C. it does not include 1	D. it does not include 0	
34) F	For a categorical predictor in a logistic regression model, what is the group that other groups are compared to called?		B
	A. Standard group	B. Reference group	
	C. Null group	D. Independent group	
35) C	computing the percent correctly predicted by the model is one way to determine		A
	A. Model fit	B. Model significance	
	C. Predictor significance	D. If assumptions are met	
36)	Which of the following is not an assumption for binary logistic regression?		A
	A. Normally distributed variables	B. No multicollinearity	
	C. Linearity	D. Independence of observations	
37)	Internal validity refers to		A
	A. Whether or not there is really a causal relationship between two variables	B. Whether or not the findings are relevant to the participants everyday lives	
	C. The degree to which the researcher feels that this was a worthwhile project	D. How accurately the measurement represents underlying concepts	
38)	If a study is reliable this means that		B
	A. It was conducted by a reputable researcher who can be trusted	B. The measure devised for concept are stable on different occasions	
	C. The findings can be generalized to other social settings	D. The methods are stated clearly enough for the research to be replicated	
39)	Survey research is a cross-sectional design and therefore		A
	A. High in replicability but low in internal validity	B. High in internal validity but low in reliability	
	C. High in ecological validity but low in external validity	D. None of the above	
40)	Panel and cohort design differ in that		C
	A. Cohort studies involve quantitative research whereas panel studies are qualitative	B. A panel study does not need rules to handle new entrants to households	
	C. A panel study can distinguish between age effects and cohort effects, but a cohort design can only detect ageing effects	D. Only a cohort study suffers from sample attrition	
41)	Cross cultural studies are an example of		B
	A. Case study design	B. Comparative design	
	C. Longitudinal design	D. Experimental design	
42)	Lincoln and Guba (1985) propose that an alternative criterion for evaluating qualitative research would be		B
	A. impressiveness	B. Trustworthiness	
	C. Messiness	D. Joyfulness	
43)	Naturalism has been defined as		D
	A. Viewing natural and social objects s belonging to the same realm	B. Being true to the nature of phenomenon under investigation	
	C. Minimizing the intrusion of artificial methods of data collection into the field	D. All of the above	

44)	In an experimental design the dependent variable is		A
	A.	The one that is not manipulated and in which any changes are observed	B.
			The one that is manipulated in order to observe any effects on the other
	C.	A measure of extent to which personal values affects research	D.
			An ambiguous concept whose meaning depends on how it is defined
45)	Youden's index integrates sensitivity and specificity information under circumstances that emphasize both sensitivity and specificity, with a value		A
	A.	From 0 to 1	B.
			Less than 0
	C.	Greater than 1	D.
			All of the above
46)	At the ROC curve and Youden index analysis we could find		B
	A.	Sensitivity and specificity	B.
			the optimal cutoff value
	C.	Standard deviation	D.
			Minimum and maximum range values
47)	The Youden index (or Youden's J statistic) is defined as		A
	A.	$J = \text{sensitivity} + \text{specificity} - 1$	B.
			$J = \text{sensitivity} - \text{specificity} + 1$
	C.	$J = 1 - \text{sensitivity} + \text{specificity}$	D.
			$J = \text{sensitivity} - \text{specificity} - 1$
48)	The balanced accuracy (BACC) is		C
	A.	Difference of sensitivity and specificity	B.
			Cumulative sensitivities of 2 or more test
	C.	Average of sensitivity and specificity	D.
			All of these
49)	The lift measures how much better the predictions by the model, C, are compared to a		A
	A.	Baseline or null model	B.
			Test hypothesis
	C.	Random model	D.
			Null hypothesis
50)	If sensitivity and specificity are diagnostically-----, the Youden index [J] will indicate the performance (the larger the better) at a given cutoff		A
	A.	Equally important	B.
			Un equally desirable
	C.	Highly variable	D.
			Negligible
51)	With respect to optimal prediction threshold a Youden Index is defined as the cut point with the		D
	A.	Max (TPR – FPR)	B.
			Max (sensitivity + specificity – 1)
	C.	Maximum difference between the TPR and FPR	D.
			All of these
52)	If $P = 0.01$ (1%), sensitivity = 0.99 (99%) and specificity = 0.99 (99%), then $P_T$ is		B
	A.	Greater than 1	B.
			Equal to 0.02
	C.	Highly significant	D.
			Non-significant
53)	The likelihood ratio of a positive test result (LR+) is the ratio of the proportion of affected individuals that test positive, and		A
	A.	The proportion of healthy individuals that test positive	B.
			The proportion of healthy individuals that test negative
	C.	The sum of healthy individuals that test positive	D.
			None of these
54)	Algebraically the ratio of LR+ to LR– equals the		D
	A.	$(a/c)/(b/d)$	B.
			Diagnostic odds ratio, DOR
	C.	$\text{Sensitivity}/(1 - \text{specificity}) / (1 - \text{sensitivity}) / \text{specificity}$	D.
			All of these
55)	The pre-test odds of disease is the ratio of the pre-test probability of disease and		A
	A.	The pre-test probability of not being diseased	B.
			The pre-test probability of died
	C.	the post-test probability of not being diseased	D.
			The post-test probability of diseased
56)	Statistical modelling of epidemiological data should not simply be the end-point of an epidemiological study, but		A
	A.	Should be integrated into the process of epidemiological research	B.
			Should not be integrated into the process of epidemiological research
	C.	Should be segregated from the process of epidemiological research	D.
			None of these
57)	Standardized residuals, which are calculated by dividing the ordinary residuals by their		A
	A.	Estimated standard error	B.
			Estimated results obtained
	C.	Estimated standard deviation	D.
			Estimated maximum likelihood
58)	Influential data are those that have a particularly strong influence on the estimation of the		C
	A.	Coefficients of variables	B.
			Y-intercept
	C.	Regression coefficients	D.
			Level of significance
59)	Plotting the ordered residuals against standard normal deviates		B

	A. Histogram	B. Q-Q plots	
	C. Skewness of data	D. None of these	
60)	Piece-wise (or segmented) regression involves modelling the relationship between an input variable and output variable using different functions over		A
	A. Distinct ranges of the input variable	B. Specified independent variable	
	C. Distinct ranges of the output variable	D. None of these	
61)	A priori knowledge should be used to develop a causal model before statistical modelling begins and, ideally, before		D
	A. Data collection	B. Data assortment	
	C. Data curation	D. All of these	
62)	A 95% confidence interval corresponds to a		C
	A. level of significance of 5% (P = 0.5)	B. level of significance of 95% (P = 0.05)	
	C. level of significance of 5% (P = 0.05)	D. level of significance of 5% (P = 50)	
63)	Methods of data presentation include		D
	A. Tables and charts	B. Graphs and plots	
	C. Tables and plots	D. Tables, charts, graphs and plots	
64)	Common formats for display of frequencies include		A
	A. Tables, pie charts and bar charts	B. Graphs and plots	
	C. Tables and plots	D. Tables, charts, graphs and plots	
65)	The relative risk, RR, is the ratio of the incidence of disease in exposed animals to the incidence		B
	A. in healthy but exposed animals	B. in unexposed animals	
	C. in resistant animals	D. All of these	
66)	The passing of a communicable disease from an infected host individual or group to a non-specific individual or group		A
	A. Transmission	B. Diffusion	
	C. Vector	D. Transformation	
67)	Separation of human that are either infected or suspected of being so that are at risk refers to:		A
	A. Quarantine	B. Isolation	
	C. Case fatality	D. Point prevalence	
68)	Reduction in the incidence of infectious diseases below the level achieved by control, so that either very few or no cases occurs, although the infectious agent may be allowed to persist is Known as		A
	A. Elimination of a disease	B. Eradication of a disease	
	C. Quarantine of infected	D. Isolation of infected	
69)	All of the followings are true regarding advantages of Cohort studies EXCEPT:		B
	A. These Can investigate multiple outcomes and potential risk factors	B. Follow-up can easily be maintained	
	C. Cohort studies are good for studying rare exposures	D. Disease progression can be studied	
70)	The passing of a communicable disease from an infected host individual or group to a non-specific individual or group		A
	A. Transmission	B. Diffusion	
	C. Vector	D. Transformation	
71)	Structured collection of data, organized so that it can be accessed easily by a range of computer software is known as		A
	A. Data	B. Raw Material	
	C. Preparation	D. None of these	
72)	Reporting of health events by health professionals who are selected to represent a geographic area, or a specific reporting group Refers to		C
	A. Outbreak Surveillance	B. Risk Factor Surveillance	
	C. Sentinel Surveillance	D. Syndromic Surveillance	
73)	Reference to surveillance, which of the following is true for Voluntary Notification?		D
	A. Legal obligation for observer to report event of interest to government official	B. Medical officers with expertise are recruited to investigate outbreaks of unusual disease syndromes	
	C. An estimate of the population under surveillance can help to calculate population-based morbidity	D. Observation of event of interest is reported to government official either directly by public or through publications or other sources	
74)	One of the following is the selection of the options for controlling risks, taking into account social values, legal requirements and costs of control		D
	A. Risk assessment	B. Risk analysis	

	C. Risk communication	D. Risk management	
75)	Reference to data management, mark the incorrect statement:		C
	A. Bar Graph – used to show relationships/ comparison between different groups	B. Line Graph – most useful in displaying data that changes continuously over time	
	C. Circle Graph – good for showing and comparing two or more distributions on the same set of axes	D. Pictograph – it uses small identical or figures of objects called isotopes in making comparisons	
76)	Reference to risk analysis, a situation where risk assessors and managers develop a common understanding of their tasks and responsibilities is termed as:		A
	A. Internal risk communication	B. External risk communication	
	C. Risk interpretation	D. Risk assessment	
77)	A questionnaire that produces consistent results just like a diagnostic test is known as:		B
	A. Valid	B. Reliable	
	C. Response rate	D. Mutually Exclusive	
78)	What are the Criteria for the success of a questionnaire?		B
	A. Reliability and validity	B. Number of completed forms	
	C. Ration of unanswered questions	D. Response of participants on a question	
79)	In which of the following sex composition can be demonstrated:		A
	A. Simple bar chart	B. Component bar chart	
	C. Pictogram	D. Pie chart	
80)	Quantitative date can be represented in:		D
	A. Pictogram	B. Pie diagram	
	C. Histogram	D. Bar diagram	
81)	A pictorial diagram of frequency distribution is denoted by which of the following:		A
	A. Histogram	B. pictogram	
	C. Pie charts	D. Bar charts	
82)	If vital index is above 100, it means:		B
	A. Population is decreasing	B. Population is increasing	
	C. Population is neither decreasing nor increasing	D. First there is decrease and then an increase in population	
83)	Mortality experiences are taken into account when defining:		A
	A. Net reproduction rate	B. Gross reproduction rate	
	C. Total fertility rate	D. General fertility rate	
84)	Approximate magnitude of completed family size can be obtained from:		D
	A. Pregnancy rate	B. General marital fertility rate	
	C. Gross reproduction rate	D. Total fertility rate	
85)	The number of new cases that occur in a known population over a specified period of time is known as:		A
	A. Incidence	B. Prevalence	
	C. Cumulative incidence	D. Incidence rate	
86)	The number of cases that are known to have occurred during a specified period of time; for example, a year is known as:		A
	A. Period prevalence	B. Point prevalence	
	C. Lifetime prevalence	D. Incidence	
87)	The proportion of non-diseased individuals at the beginning of a period of study that becomes diseased during the period:		D
	A. Incidence	B. Point prevalence	
	C. Odds ratio	D. Cumulative incidence	
88)	The analysis based on study of price fluctuations, production of commodities and deposits I bank is classified as		C
	A. Sample series analysis	B. Numerical analysis	
	C. Time series analysis	D. Experimental analysis	
89)	Outbreak of disease is one that occurs <i>irregularly and haphazardly</i> is called as		C
	A. Pandemic	B. Outbreak	
	C. Sporadic	D. Endemic	
90)	The time of occurrence of cases of a disease constitute its _____ distribution.		B
	A. Demography	B. Temporal	
	C. Spatial	D. None of these	
91)	The place of occurrence of cases of a disease constitutes its _____ distribution.		C
	A. Demography	B. Temporal	

	C. Spatial	D. None of these	
92)	Subtraction of the risk for the non-exposed group from the risk for the exposed group is known as		D
	A. Attributable risk	B. Attributable rate	
	C. $\delta_{exp} = a / (a + b) - c / (c + d)$	D. All of these	
93)	It is results from systematic differences between characteristics of the study population and the target population from which it was drawn		A
	A. Selection bias	B. Confounding	
	C. Misclassification	D. None of these	
94)	The degree to which a statistical model represents the data collected is known as the		A
	A. Fit	B. Reliability	
	C. Homogeneity	D. Validity	
95)	If we calculated an effect size and found it was $r = .42$ which expression would best describe the size of effect?		C
	A. Small	B. Medium to large	
	C. Medium to large	D. Large	
96)	What is the relationship between the sum of squared errors (SS), the sample size (n) and the variance (s <sup>2</sup> )		B
	A. $SS = s^2 / (n - 1)$	B. $n = (s^2 / SS) - 1$	
	C. $s^2 = SS / (n - 1)$	D. $s^2 = SS / (n - 1)$	
97)	If we use the mean as a model, what does the variance represent?		A
	A. The average error between the model and the observed data	B. The total error between the model and the observed data	
	C. The squared total error between the model and the observed data	D. The square-rooted average error between the model and the observed data	
98)	The branch of statistics which deals with the development of particular statistical methods is classified as		D
	A. Industry Statistics	B. Mathematical statistics	
	C. Economic Statistics	D. Applied statistics	
99)	The tools such decision making by nominal group, brainstorming and terms building are all considered as		A
	A. Behavioral tool	B. Serial tools	
	C. Parallel tools	D. Statistical tools	
100)	The model which consists of management philosophy, behavioral tools and statistical methods as key steps towards improvement is considered as		C
	A. Serial improvement process model	B. Behavioral improvement process model	
	C. Quality improvement process model	D. Statistics improvement process model	
101)	Ability of an infectious agent to induce clinically apparent illness is known as:		C
	A. Infectivity	B. Virulence	
	C. Pathogenicity	D. None of the above	
102)	The principal of 'at risk' approach is:		B
	A. Something for all	B. More for the needy	
	C. All for some	D. All for all	
103)	The aspect of epidemiology which deals with distribution of disease is:		A
	A. Descriptive	B. Analytical	
	C. Experimental	D. Interventional	
104)	The type of epidemiological study which deals with identifying underlying causes of disease and to test etiological hypothesis is:		B
	A. Descriptive	B. Analytical	
	C. Experimental	D. None of the above	
105)	The numerator is not component of denominator:		B
	A. Rate	B. Ratio	
	C. Proportion	D. None of the above	
106)	Most useful single measure of mortality is:		C
	A. Case fatality rate	B. Crude death rate	
	C. Age specific death rate	D. Proportional mortality rate	
107)	In an outbreak of cholera in a village of 2000 population 20 cases have occurred and 5 have died. Case fatality rate is:		D
	A. 1%	B. 0.25%	
	C. 5%	D. 25%	

108)	The number of deaths in people aged above 50 years as a percentage of total deaths of all age groups is known as:		B
	A. Expectancy of life	B. Proportional mortality ratio	
	C. Mortality by cause	D. Crude death rate	
109)	Age adjusted summary of current all causes mortality is:		C
	A. Multivariate analysis	B. Proportional mortality rate	
	C. Life table	D. Regression technique standardization	
110)	All are true of attack rate <i>except</i> :		A
	A. It is a type of prevalence rate	B. Expressed as percentage	
	C. Used when population is exposed to risk for a limited period of time	D. Reflects extent of epidemic	
111)	A village with 2000 population was surveyed for 1 year and 10 were found to be diseased. Assuming that the disease lasts for 2 years, prevalence is:		C
	A. 20/1000	B. 30/1000	
	C. 10/1000	D. 50/1000	
112)	If P indicates prevalence, I: incidence and D: duration of illness, then the relation between prevalence and incidence is expressed as:		A
	A. $P = I \times D$	B. $I = P \times D$	
	C. $P = I/D$	D. None of the above	
113)	Prevalence is useful:		A
	A. To identify potential high risk population	B. To control disease	
	C. For distribution of disease	D. Efficacy of preventive and therapeutic measure	
114)	All are feature of point source epidemic <i>except</i> :		D
	A. Epidemic curve rises and falls rapidly	B. Epidemic tends to be explosive	
	C. Epidemic curve shows no secondary waves	D. Epidemic continues over more than one incubation period	
115)	"CHERNOBYL" tragedy is an example of:		A
	A. Point source epidemic	B. Propagated epidemic	
	C. Modern epidemic	D. Continuous epidemic	
116)	The following study gives incidence rate of a disease:		A
	A. Longitudinal study	B. Experimental study	
	C. Randomized controlled trial	D. Case control study	
117)	Data about prevalence and distribution of illness and state of health of a community at one point of time is given by:		B
	A. Longitudinal study	B. Cross sectional study	
	C. Double blind study	D. Surveillance	
118)	Analytical studies are undertaken to:		C
	A. Determine the occurrence and distribution of disease	B. Screening of new cases in the community	
	C. Test the etiological hypothesis	D. None of the above	
119)	A study conducted on babies born between 1 <sup>st</sup> January 1970 to 31 <sup>st</sup> December 1970 would be:		A
	A. Retrospective	B. Prospective	
	C. Cohort study	D. None of the above	
120)	In epidemiological studies, important criterion for control group is that it should be:		C
	A. Age and socioeconomic status matched	B. Equal in number	
	C. That the factor to be studied should be absent	D. That the factor to be studied should be present	
121)	Which of the following is not true about cohort study?		D
	A. Prospective study	B. Type of analytical study	
	C. Study proceeds from cause to effect	D. Study is short-lived and technique is crude	
122)	All the following can be obtained from prospective study <i>except</i> :		B
	A. Attributable risk	B. Prevalence rate	
	C. Relative risk	D. Incidence rate	
123)	Randomization is:		C
	A. Mixing control with cases	B. Mixing different types of controls	
	C. Statistical procedure of allocating participants into study and control groups	D. Selecting characteristics of case group	
124)	The likelihood of a causal relationship is increased by:		D
	A. Temporal association	B. Strength of association	



	C. Biological plausibility	D. All of the above	
125)	The first person becoming sick in an epidemic is called:		C
	A. Index case	B. Contact case	
	C. Primary case	D. Secondary case	
126)	The first case to come to the attention of the investigator is:		A
	A. Index case	B. Primary case	
	C. Secondary case	D. Contact case	
127)	An agent with low pathogenicity and high infectivity would result in development of:		A
	A. Carrier	B. Clinical case	
	C. Epidemic	D. pandemic	
128)	Carriers are more dangerous than cases because they:		C
	A. Increase virulence	B. Increase duration of disease	
	C. Infect more people	D. More infectious	
129)	Factor which influences ability of vector to transmit disease is:		D
	A. Susceptibility	B. Infectivity	
	C. Domesticity	D. All of the above	
130)	Incubation period is useful to determine:		D
	A. Source of infection	B. Period of surveillance	
	C. Prognosis of disease	D. All of the above	
131)	Interval between onset of primary and secondary case is called:		B
	A. Latent period	B. Serial interval	
	C. Generation time	D. Incubation period	
132)	Interval of time between receipt of infection by a host and maximal infectivity of that host is:		B
	A. Average incubation period	B. Generation time	
	C. Latent period	D. Communicable period	
133)	Secondary attack rate reflects:		B
	A. Severity	B. Communicability	
	C. Fatality	D. Infectivity	
134)	Prospective screening is done for:		B
	A. Case detection	B. Control of disease	
	C. Disability limitation	D. Prevention of disease	
135)	In a community, identification of high risk individuals for coronary artery, disease and the prevention of risk factors is:		A
	A. Selective screening	B. Surveillance	
	C. Tertiary prevention	D. Primary prevention	
136)	The best and the most economical method of screening for a disease is:		A
	A. High risk screening	B. Multiphasic screening	
	C. Mass screening	D. Prospective screening	
137)	All are advantages of questionnaire method of data collection except:		C
	A. Simple	B. Cheap	
	C. High response rate	D. Interviewer not required	
138)	Most satisfactory method of collecting is:		A
	A. Oral questionnaires	B. Postal questionnaires	
	C. Results of experiments	D. First hand reports	
139)	The probability of a reading failing outside 95% confidence limit is:		A
	A. 1 in 20	B. 1 in 15	
	C. 1 in 40	D. 1 in 30	
140)	Restriction of activities of a contact, who has been exposed to a case of communicable disease for maximum incubation period, is termed as:		B
	A. Elimination	B. Quarantine	
	C. Surveillance	D. Control	
141)	Which one of the following gives the strength of association between the cause and the disease?		D
	A. Prevalence rate	B. Case fatality rate	
	C. Adjusted rate	D. Incidence rate	
142)	Which one of following is not included in analytical epidemiological studies?		D

	A. Historical cohort studies	B. Cohort studies	
	C. Case control	D. Case report	
143)	Difference in incidence rate of a disease between exposed group and non-exposed group is:		A
	A. Attributable risk	B. Relative fraction	
	C. Prevalence rate	D. Odds ratio	
144)	The branch of epidemiology which deals with the analysis of observations using suitable diagnostic and statistical procedures:		C
	A. Descriptive epidemiology	B. Experimental epidemiology	
	C. Analytical epidemiology	D. Theoretical epidemiology	
145)	The branch of epidemiology which deals with the observing and recording diseases and possible causal factors:		A
	A. Descriptive epidemiology	B. Experimental epidemiology	
	C. Analytical epidemiology	D. Theoretical epidemiology	
146)	The branch of epidemiology which deals with the representation of disease using mathematical 'models' that attempt to simulate natural patterns of disease occurrence:		D
	A. Descriptive epidemiology	B. Experimental epidemiology	
	C. Analytical epidemiology	D. Theoretical epidemiology	
147)	_____ is a survey records events occurring at a particular point of time:		A
	A. Cross-sectional survey	B. Longitudinal survey	
	C. Census	D. Retrospective survey	
148)	_____ is a survey records events over a period of time		B
	A. Cross-sectional survey	B. Longitudinal survey	
	C. Census	D. Retrospective survey	
149)	A man maybe vaccinated against COVID-19 and develop immunity against the agent. It is concluded that vaccine prevent COVID-19 in humans. Which kind of scientific conclusion is this?		C
	A. Deduction	B. Abduction	
	C. Induction	D. None of these	
150)	A scientist hypothesized that "the helminths are the enemies for human beings as well as animals" but the scientific community described that the helminths are able to reduce the risk of autoimmune diseases. The scientist rejects the hypothesis of scientific community. This kind of hypothesis acceptance is the example of		
	A. Authority	B. Intuition	
	C. Tenacity	D. scientific	
151)	One of the followings is an example of non-causal association with the development of bottle jaw due to <i>Hemonchus contortus</i>		C
	A. Positive association between the parasite and bottle jaw	B. Positive association between the parasite and hypoproteinemia	
	C. Positive association between hypoproteinemia and bottle jaw	D. There is no association between hypoproteinemia and bottle jaw	
152)	The cattle is suffering from Foot and Mouth disease that had led to debilitation and reduced the immunity of the host. Following on, the patient got infected by Fasciola and developed hypoproteinemia/bottle jaw. In this case study, compromised immune status and development of hypoproteinemia due to fasciolosis is the example of one of the followings:		A
	A. Predisposing factor and necessary cause	B. Precipitating factor and sufficient cause	
	C. Predisposing factor and sufficient cause	D. Enabling factor and necessary cause	
153)	The climate which comprises the normal components of weather to which animals are exposed is:		A
	A. Macroclimate	B. Microclimate	
	C. Terrestrial	D. None of these	
154)	Sensitivity is ability of a test to detect:		A
	A. True positives	B. True negatives	
	C. False positive	D. False negatives	
155)	If the cut off point in the interpretation of a test is raised, one of the following may occur:		A
	A. Sensitivity decreases and specificity increases	B. Sensitivity increases and specificity decreases	
	C. Sensitivity and specificity both increases	D. Sensitivity and specificity both decreases	
156)	In order to find out whether there is significant association or not between two variables, we calculate:		A
	A. Coefficient of correlation	B. Coefficient of regression	

	C. Standard deviation	D. Standard error	
157)	Which is not true of coefficient of correlation?		C
	A. Represented by symbol 'r'	B. r = 0 indicates no correlation	
	C. r of 0.1 indicates strong positive correlation	D. r near -1 indicates strong negative correlation	
158)	If we know the value of one variable in an individual case and wish to know the value of another variable, we calculate:		B
	A. Coefficient of correlation	B. Coefficient of regression	
	C. Standard error of mean	D. Geometric mean	
159)	More declining death rate and birth rate tend to fall, the stage is:		A
	A. Late expanding	B. Early expanding	
	C. High stationary	D. Declining	
160)	In the definition of epidemiology, "determinants" generally includes:		D
	A. Agents	B. Causes	
	C. Risk factors	D. All of the above	
161)	In the definition of epidemiology, "distribution" refers to:		B
	A. Who	B. When	
	C. Where	D. Why	
162)	John Snow's investigation of cholera is considered a model for epidemiologic field investigations because it included a:		C
	A. Biologically plausible hypothesis	B. Comparison of a health outcome among exposed and unexposed groups	
	C. Multivariate statistical model	D. Spot map	
163)	When analyzing surveillance data by age, which of the following age groups is preferred?		D
	A. 1-year age groups	B. 5-year age groups	
	C. 10-year age groups	D. Depends on the disease	
164)	A study in which children are randomly assigned to receive either a newly formulated vaccine or the currently available vaccine, and are followed to monitor for side effects and effectiveness of each vaccine, is an example of which type of study?		B
	A. Experimental	B. Observational	
	C. Cohort	D. Case-control	
165)	The Iowa Women's Health Study, in which researchers enrolled 41,837 women in 1986 and collected exposure and lifestyle information to assess the relationship between these factors and subsequent occurrence of cancer, is an example of which type(s) of study?		C
	A. Experimental	B. Observational	
	C. Cohort	D. Case-control	
166)	British investigators conducted a study to compare measles-mumps-rubella (MMR) vaccine history among 1,294 children with pervasive development disorder (e.g., autism and Asperger's syndrome) and 4,469 children without such disorders. (They found no association.) This is an example of which type(s) of study?		D
	A. Experimental	B. Observational	
	C. Cohort	D. Case-control	
167)	The epidemiologic triad of disease causation refers to		A
	A. Agent, host, environment	B. Time, place, person	
	C. Source, mode of transmission, susceptible host	D. John Snow, Robert Koch, Kenneth Rothman	
168)	A reservoir of an infectious agent can be:		D
	A. A non-symptomatic human	B. The environment	
	C. An animal	D. All of the above	
169)	Disease control measures are generally directed at which of the following?		A
	A. Eliminating the reservoir	B. Eliminating the vector	
	C. Eliminating the host	D. Interrupting mode of transmission	
170)	A propagated epidemic is usually the result of what type of exposure?		D
	A. Point source	B. Continuous common source	
	C. Intermittent common source	D. Person-to-person	
171)	What are focus areas of nutritional epidemiology?		C
	A. The role of nutritional factors in causing disease in a population.	B. How changes in food intake in the population can promote good health.	
	C. Both	D. None	
172)	In an epidemiological context, what is the population at risk?		B

	A. The proportion of a population that engage in risky behaviours.	B. The group of people that may experience the outcome we want to study.	
	C. A group of people participating in a study that may be harmful to them.	D. The population group with the highest relative risk of disease.	
173)	In which one of the following circumstances will the prevalence of a disease in the population increase, all else being constant?		B
	A. If the incidence rate of the disease falls.	B. If survival time with the disease increases.	
	C. If recovery of the disease is faster.	D. If the population in which the disease is measured increases	
174)	Which of the following statements about exposures is true?		A
	A. 'Exposure' refers to contact with some factor that may be harmful or beneficial to health	B. An exposed individual has a greater risk of disease.	
	C. Dietary intake is not an 'exposure' because individuals make a choice about what they eat.	D. High body mass index is a risk factor for a range of health conditions, therefore, it cannot be treated as a single exposure.	
175)	Epidemiological measures of effect assess the _____ between an exposure and an outcome.		C
	A. strength of the causal mechanisms	B. strength of the reversibility	
	C. strength of the association	D. strength of a confounding factor	
176)	It is possible to reduce (though not eliminate) information bias in assessment of dietary intake by		B
	A. gathering information about many different aspects of people's dietary habits	B. collecting data about dietary intake at the onset of a study, before people have experienced symptoms of disease.	
	C. collecting data on all possible confounders.	D. making sure that the study sample is representative of the population.	
177)	In a cohort study, the risk ratio of developing diabetes was 0.86 when comparing consumers of tea (the exposed) to those who did not drink tea (the unexposed). Which one statement is correct?		C
	A. The tea drinkers have lower risk of developing diabetes.	B. The tea drinkers have higher risk of developing diabetes	
	C. Based on the information given we cannot tell if the observed difference in disease risk is the result of chance.	D. The risk ratio is close to the value one, so there is no difference in disease risk between the two groups.	
178)	When epidemiologists judge the evidence to establish possible causes of a health outcome, they consider		D
	A. The estimated strength of the association between an exposure and the outcome.	B. Evidence that the exposure of interest has appeared before the outcome.	
	C. Evidence showing that reductions in the exposure level will reverse the risk of the outcome	D. All of the options given	
179)	Randomised, controlled trials provide strong evidence that an observed effect is due to the intervention (the assigned exposure). One reason is because		A
	A. when the participants are randomised, many characteristics and possible confounding factors are likely to be evenly distributed in the groups	B. it is easier to measure the outcome variable with great precision in randomised, controlled trials compared to in other study designs.	
	C. the exposure level and the outcome are measured at the same time.	D. The study participants are volunteers and therefore motivated to take part in the study.	
180)	Confounding is a particular challenge in nutritional epidemiology because		D
	A. people change their diets over time.	B. it is difficult to measure people's diets accurately in large studies.	
	C. there are no good methods to adjust for confounding in nutritional studies.	D. different dietary components are correlated with each other, making it difficult to separate their effects.	
181)	An investigator takes a sample of healthy individuals, record their ongoing solar exposure, and relate that to the subsequent occurrence of skin cancer in the same group.		C
	A. Case-control study	B. Ecological study	
	C. Cohort study	D. Cross-sectional study	
182)	Which of the following is an advantage of a case-control study?		D
	A. There is little or no bias in assessment of exposure	B. Dependence on recall by subjects in the study minimized.	
	C. It is possible to determine the true incidence of the disease.	D. It may be used to study etiology of a rare disease.	
183)	How can geographical information system (GIS) help disease control? Choose the incorrect answer.		A

	A. It can specify the high risk age group.	B. It can help us hypothesize possible risk factors.	
	C. It can evaluate the accessibility to the health service.	D. It can specify the place for targeted control.	
184)	The mode of transport of an infectious agent through the environment to a susceptible host is called a:		D
	A. Carrier	B. Reservoir	
	C. Vector	D. Vehicle	
185)	A longitudinal or prospective study is also referred to as a:		C
	A. Ecological study	B. Cross-sectional study	
	C. Cohort study	D. Observational study	
186)	The occurrence of cases of disease more than what would normally be expected in a defined community, geographical area or season is known as:		A
	A. Outbreak	B. Epidemic	
	C. Pandemic	D. Hyperendemic	
187)	In an epidemiological context, what is the population at risk?		B
	A. The proportion of a population that engage in risky behaviours	B. The group of people that may experience the outcome we want to study	
	C. A group of people participating in a study that may be harmful to them	D. The population group with the highest relative risk of disease	
188)	The proportion of an initially disease-free population that develops disease refers to:		A
	A. Cumulative Incidence	B. Incidence Rate	
	C. Person Time Rate	D. Risk Ratio	
189)	One of the followings refers to methods relying on detection of clinical case features that are discernable before confirmed diagnoses are made. It focuses on one or more symptoms rather than a physician-diagnosed or laboratory-confirmed disease		D
	A. Outbreak Surveillance	B. Risk Factor Surveillance	
	C. Sentinel Surveillance	D. Syndromic Surveillance	
190)	For management of data, _____ is used to investigate an association between two variables by analyzing patterns across the multiple points.		B
	A. Dot maps	B. Scatter plot	
	C. Histogram	D. Epidemic curve	
191)	What are the Components of meta-analysis in a trails design of randomization?		C
	A. Qualitative and quantitative	B. Aggregation and combination	
	C. Statistical power and primary end points	D. Experimental and theoretical	
192)	Number of individuals die in a particular time from number of individuals in population at the beginning of that period refers to:		D
	A. Case fatality rate	B. Incidence	
	C. Survival percentage	D. Cumulative mortality	
193)	The ratio between probability of occurring of an event to its probability of not occurring is known as:		D
	A. Expected Prevalence	B. Estimated Prevalence	
	C. Relative Risk	D. Odds Ratio	
194)	Which one is true about Epidemic Occurrence?		A
	A. Sudden and unpredictable increase of disease	B. A high-level disease is present continuously in the population effecting all the age groups	
	C. Constant presence of a disease in population	D. Cluster of cases of disease	
195)	Which of the following is not a major method of data collection?		C
	A. Questionnaires	B. Focus groups	
	C. Correlational method	D. Secondary Data	
196)	The number of new cases in a defined population occurring during some time interval refers to:		A
	A. Incidence of a Disease	B. Prevalence	
	C. Hyperendemicity	D. Epidemiology	
197)	Diseases that are always present in a community, usually at a low, more or less constant, frequency are classified as having a pattern of		B
	A. Epidemic	B. Endemic	
	C. Pandemic	D. Transmission	

198)	The proportion of disease among the total population that would be eliminated if the exposure were eliminated is known as		A
	A. Attributable proportion among the total population	B. Attributable proportion among the exposed	
	C. Relative measures of comparison among population	D. Absolute measures of comparison among population	
199)	Which of the following tool is used to measure the strength of an association during epidemiological investigations?		C
	A. Prevalence or Proportion	B. Incidence or Death Rate	
	C. Risk or Odds Ratio	D. Trends over Time Cohort	
200)	One of the following is mostly active and is used to find additional cases to pinpoint the source of the outbreak. This includes finding and interviewing individuals that contracted the disease to detect commonalities		A
	A. Outbreak Surveillance	B. Risk Factor Surveillance	
	C. Sentinel Surveillance	D. Syndromic Surveillance	

Subject: Preventive and Community Medicine MCQ's 201-350			Answer Key
201)	Rabies is caused by		A
	A. lyssaviruses	B. Adeno virus	
	C. Aphtho virus	D. Herpes virus	
202)	Anthrax is caused by		C
	A. <i>Escherichia coli</i>	B. <i>Actinomyces bovis</i>	
	C. <i>Bacillus anthracis</i>	D. <i>Staph aureus</i>	
203)	Which is not a reservoir of rabies		D
	A. Bat	B. Rodents	
	C. Fox	D. Bison	
204)	Forms of rabies		C
	A. 1	B. 3	
	C. 2	D. 4	
205)	Causative agent of rabies is		A
	A. Neurotropic	B. Myotropic	
	C. Nephrotropic	D. Epitheliotropic	
206)	Causative agent of rabies is a		A
	A. Virus	B. Fungus	
	C. Parasite	D. Bacteria	
207)	Causative agent of anthrax is		D
	A. Comma shaped	B. Coccus	
	C. Spirochete	D. Rod shaped	
208)	Causative agent of bubonic plague		C
	A. Herpes virus	B. <i>Bacillus anthracis</i>	
	C. <i>Yersinia pestis</i>	D. <i>Borrelia burgdorferi</i>	
209)	Vector for <i>Yersinia pestis</i>		A
	A. <i>Xenopsylla cheopis</i>	B. Ixodes tick	
	C. <i>Ctenocephalides canis</i>	D. Argus tick	
210)	Vector of black death resides _____ on		A
	A. Skin	B. Brain	
	C. Gut	D. Muscles	
211)	Black death is caused by		C
	A. Virus	B. Nematode	
	C. Bacteria	D. Protozoa	
212)	Types of plague based on clinical manifestations		D
	A. Bubonic	B. Enteric	
	C. Toxemic	D. Both a , b & c	
213)	Negri bodies are seen histologically in		D
	A. Anthrax	B. Salmonellosis	
	C. Cyanide toxicity	D. Rabies	
214)	Which is not a zoonotic disease		A
	A. FMD	B. Anthrax	
	C. Ebola virus	D. Tuberculosis	
215)	Bovine Tuberculosis is caused by		A
	A. <i>Mycobacterium tuberculosis</i>	B. <i>Mycobacterium bovis</i>	
	C. <i>Mycobacterium ovis</i>	D. <i>Mycoplasma gallinarum</i>	
216)	Infection of anthrax can enter the body by		D
	A. Ingestion	B. Direct contact	
	C. Inhalation	D. All of Above	

217)	In humans there are main forms of anthrax	A. 2	B. 4	C
		C. 3	D. 5	
218)	Mad cow disease is caused by	A. Viruses	B. Protozoa	D
		C. Bacteria	D. Proteins	
219)	Mycobacteria are	A. Gram +ive	B. Acid-fast	B
		C. Gram -ive	D. None of these	
220)	Bangs disease is caused by	A. Brucella species	B. Mycoplasma species	A
		C. Clostridial species	D. None of these	
221)	Brucellosis is also called	A. Malta fever	B. Undulant fever	D
		C. Bangs disease	D. All of above	
222)	Brucellosis in cattle leads to abortion in _____ trimester	A. 1st	B. 2 <sup>nd</sup>	C
		C. 3 <sup>rd</sup>	D. At any time in gestation	
223)	The brucella is an organism	A. Intracellular	B. Both	A
		C. Extracellular	D. None	
224)	Human infection with brucellosis is most serious when it results from exposure to	A. <i>B. melitensis</i>	B. <i>B. abortus</i>	A
		C. <i>B. bovis</i>	D. <i>B. canis</i>	
225)	Brucellosis is transferred	A. Horizontally	B. Both	A
		C. Vertically	D. None	
226)	<i>Escherichia coli</i> is in the family	A. actinomycetaceae	B. <i>Enterobacteriaceae</i>	B
		C. Bacillaceae	D. Clostridiaceae	
227)	Transmission of <i>E. coli</i> O157:H7 occurs through	A. consumption of contaminated food or water	B. direct contact with infected animals	D
		C. their feces or contaminated soil	D. All of above	
228)	<i>Leptospira</i> is _____ shaped	A. Spiral	B. Comma	A
		C. Rod	D. Coccus	
229)	Red urine is a characteristic of	A. Leptospirosis	B. Pp hb	D
		C. Babesiasis	D. All of above	
230)	<i>Leptospire</i> s reside in the of infected reservoir hosts	A. Kidneys	B. Heart	D
		C. Brain	D. None of these	
231)	Methicillin-resistant <i>Staphylococcus aureus</i> (MRSA) are _____ bacteria	A. Gram-positive	B. Acid fast	A
		C. Gram-negative	D. None of these	
232)	Q fever is a highly contagious zoonotic disease caused by	A. <i>B. bovis</i>	B. <i>Mycoplasma gallinarum</i>	C
		C. <i>Coxiella burnetii</i>	D. <i>Escherichia coli</i>	
233)	<i>Coxiella burnetii</i> , causative agent of Q fever, is an _____ bacterium.	A. Obligate extracellular	B. Extracellular	D
		C. Facultative extracellular	D. obligate intracellular	
234)	<i>Salmonella</i> bacteria are classified into over _____ different serovars based on surface proteins.	A. 200	B. 2500	B
		C. 500	D. 1500	



235)	Toxoplasmosis is caused by in cat	A. <i>Toxoplasma gondii</i>	B. <i>Toxoplasma colubri</i>	A
		C. <i>Toxoplasma hammondi</i>	D. <i>Toxoplasma ranae</i>	
236)	Toxoplasmosis is caused by	A. Virus	B. Protozoa	B
		C. Bacteria	D. Fungus	
237)	<i>Bartonellosis</i> is transmitted by	A. bloodsucking arthropods	B. Millipedes	A
		C. Crustaceans	D. Centipedes	
238)	In humans bortenella causes	A. Cat scratch disease	B. Malaria	A
		C. Dengue fever	D. None of these	
239)	<i>Toxocara cati</i> is a	A. Nematode	B. Cestode	A
		C. Trematode	D. Arthropode	
240)	Cryptosporidial infection is basically	A. Water borne	B. Vertical	A
		C. Venereal	D. None	
241)	_____mosquitoes are the main transmitters Japanese encephalitis	A. Culex	B. Aedes	A
		C. Anopheles	D. All of above	
242)	Louping ill is caused by an_____infection	A. Aphtho virus	B. Lyssa virus	D
		C. Herpes virus	D. Arbovirus	
243)	In humans Approximately 95% of all cases represent _____anthrax	A. Cutaneous	B. Orophangeal	A
		C. Intestinal	D. None of these	
244)	Lyme disease is caused by _____in humans	A. <i>B. anserina</i>	B. <i>B. coriaceae</i>	D
		C. <i>B. theileri</i>	D. <i>B. burgdorferi</i>	
245)	Lyme disease is transmitted by _____	A. Dermacentar	B. Amblyomma	C
		C. Ixodex	D. Argus	
246)	Camphylobacter specie leading to abortion in human female	A. <i>C. jejuni</i>	B. <i>C. fetus</i>	C
		C. <i>C. lari</i>	D. <i>C. coli</i>	
247)	Ornithosis is caused by	A. <i>C. psittaci</i>	B. <i>M. pneumoniae</i>	A
		C. <i>C. burnetii</i>	D. Legionella	
248)	Which protozoal disease is transmitted to humans	A. Anaplsmosis	B. Amoebiasis	D
		C. Giardiasis	D. All of above	
249)	Bloody dirrohea in e. coli infection in due to	A. Enterotoxic	B. Enterohemmoragic	B
		C. Enteroinvasive	D. Enteropathogenic	
250)	Shiga toxin is produced by	A. E.coli	B. <i>B. burgdorferi</i>	A
		C. <i>Toxoplasma gondii</i>	D. Staph aureus	
251)	Farcy is caused by	A. <i>Toxoplasma gondii</i>	B. Burkholderia mallei	B
		C. Staph aureus	D. <i>C. psittaci</i>	
252)	Farcy is other name of	A. Strangles	B. Glanders	B
		C. Tetnus	D. Pneumonia	

253)	Tetnus is caused by	A. C. tetni	B. C.perferingens	A
		C. C. botulinum	D. C. difficile	
254)	Botulism is caused by	A. C. tetani	B. C.perferingens	D
		C. C. difficile	D. C. botulinum	
255)	Circling disease is caused by	A. Listeria monocytogenes	B. C.perferingens	A
		C. <i>Toxoplasma gondii</i>	D. Staph aureus	
256)	Clinical forms of plague	A. bubonic	B. pneumonic	D
		C. septicemic	D. All of these	
257)	Tularemia is a plague-like contagious disease caused by	A. Francisella tularensis	B. C. difficile	A
		C. <i>Toxoplasma gondii</i>	D. Staph aureus	
258)	Severe mucoid blood-tinged diarrhea with spasms, colics, and tenesmus develop due to	A. E. histolytica	B. C. tetni	A
		C. M. pneumoniae	D. H. pylori	
259)	Which is a zoonotic disease	A. Babesia	B. FMD	A
		C. Theileria	D. All of these	
260)	Babesia is transmitted by	A. Tick	B. Mosquito	A
		C. Fly	D. Biting midges	
261)	Balantidiasis, caused by the ciliate	A. Balantidium coli	B. <i>Toxoplasma gondii</i>	A
		C. Staph aureus	D. H. pylori	
262)	Chagas' disease is caused by	A. Trypanosoma cruzi	B. Both	A
		C. Trypanosoma evansi	D. None	
263)	LAMBLIASIS is other name of	A. Giardiasis	B. Anplasmosis	A
		C. Trypanosomiasis	D. Babesiosis	
264)	LAMBLIASIS is caused by	A. Giardia duodenalis	B. G. intestinalis	D
		C. G. lamblia	D. All of these	
265)	Malaria is caused by	A. Plasmodium	B. Theileria	A
		C. Babesia	D. Trypanosoma	
266)	Causative agent of rabies is _____ shaped	A. Bullet shaped	B. Hexagonal	A
		C. Round	D. None	
267)	Incubation period of rabies is	A. 1 day	B. Days to years	B
		C. 7 day7	D. 10day7	
268)	Toxin of C.botulinum are	A. Heat stable	B. Both	A
		C. Heat labile	D. None	
269)	Tuberclin test is diagnostic tool for	A. TB	B. FMD	A
		C. RVF	D. BEF	
270)	Glanders is diagnosed by	A. Tuberclin	B. Mallein test	B
		C. RBPT	D. None	

271)	Diagnostic test for malta fever	A. RBPT	B. LDH	A
		C. AGPT	D. ALL of these	
272)	Hydated cyst is caused by	A. Nematode	B. Trematode	C
		C. Cestode	D. None	
273)	Clostridia are	A. Gram positive	B. Acid fast	A
		C. Gram negative	D. None	
274)	Which one is not zoonotic	A. Ebola virus	B. SARS-COV	D
		C. Hanta virus	D. All of these	
275)	Maximum number of reported diseases caused by	A. Yersia pestis	B. Mycoplasma	A
		C. Borellia insenrina	D. Mucobacterium	
276)	This nucleic acid is found in hepatitis B virus	A. dsRNA	B. ssDNA	D
		C. ssRNA	D. dsDNA	
277)	Hepatitis G virus is from the family	A. Coronaviridae	B. Hepadnaviridae	C
		C. Flaviviridae	D. Caliciviridae	
278)	This Hepatitis virus is not an RNA virus	A. Hepatitis G virus	B. Hepatitis E virus	C
		C. Hepatitis B virus	D. Hepatitis A virus	
279)	This form of Hepatitis could be passed via contaminated water or food	A. A and E	B. C	A
		C. B	D. All of these	
280)	This can cause Hepatitis	A. Improper immune system	B. Alcohol and medicines	D
		C. Viruses	D. All of these	
281)	The most reliable detection test for Hepatitis E is	A. ELISA test	B. Polymerase chain reaction	B
		C. Western blot assay	D. ELISA test for IgM anti-HEV	
282)	This agent represents an isolate of Hepatitis G virus	A. GBV-C	B. GBV-B	A
		C. GBV-A	D. None of these	
283)	This organ is majorly affected by hepatitis	A. Liver	B. Heart	A
		C. Kidney	D. Brain	
284)	In a sample of blood, doctors look for which of these elevated levels to confirm Hepatitis?	A. Interferons	B. Calcium	C
		C. Liver enzyme	D. White blood cells	
285)	The purpose is to limit the incidence of disease by controlling causes and risk factors	A. Primordial prevention	B. Primary prevention	B
		C. Secondary prevention	D. Tertiary prevention	
286)	The property of a test to identify the proportion of truly ill persons in a population	A. Sensitivity	B. Specificity	A
		C. Positive predictive value	D. Negative predictive value	
287)	The probability of a persons having the disease when the test is positive	A. Sensitivity	B. Specificity	C
		C. Positive predictive value	D. Negative predictive value	
288)	The extent to which a test is measuring what it is intended to measure			D

	A. Sensitivity	B. Specificity	
	C. Reliability	D. Validity	
289)	A study that measures the number of persons with influenza in a calendar year		C
	A. Cohort study	B. Case control	
	C. Cross sectional	D. Case report	
290)	Stage by which the presence of factors favors the occurrence of disease		A
	A. Stage of susceptibility	B. Stage of pre-symptomatic disease	
	C. Stage of clinical disease	D. Stage of disability	
291)	Modes of horizontal transmission of disease, except		D
	A. Contact	B. Vector	
	C. Common Vehicle	D. Genetic	
292)	An infected person is less likely to encounter a susceptible person when a large proportion of the members of the group are immune		C
	A. Active immunity	B. Passive immunity	
	C. Herd immunity	D. Specific immunity	
293)	Occurrence in the community of a number of cases of disease that is unusually large or unexpected		B
	A. Endemic	B. Epidemic	
	C. Pandemic	D. Infection	
294)	Measures of central tendency, except		D
	A. Mean	B. Median	
	C. Mode	D. Variance	
295)	Range of values surrounding the estimate which has a specified probability of including the true population values		C
	A. Standard deviation	B. Standard error	
	C. Confidence interval	D. Correlation coefficient	
296)	The probability of rejecting the null hypothesis when it is true		A
	A. Type 1 error	B. Type 2 error	
	C. Power of a statistical test	D. Level of significance	
297)	The following are measures of disease frequency, except		D
	A. Incidence rate	B. Prevalence	
	C. Cumulative incidence	D. Relative risk	
298)	The proportion of cases of a specified disease or condition which are fatal within a specified time		B
	A. Morbidity rate	B. Case fatality rate	
	C. Proportionate mortality	D. Death rate	
299)	The relation between exposure and disease is considered to be causal or etiological in the following, except		D
	A. Dose response relation	B. Cessation of exposure	
	C. Temporal relation	D. No confounding	
300)	A study that measures the incidence of a disease		D
	A. Case report	B. Cross sectional	
	C. Case control	D. Cohort	
301)	A study wherein bias is less likely to occur		D
	A. Case report	B. Cross sectional	
	C. Case control	D. Cohort	
302)	The proportion of disease incidence that can be attributed to a specific exposure		C
	A. Relative risk	B. Odds ratio	
	C. Attributable risk	D. Potential risk	
303)	Recall is an example of what type of bias		B
	A. Selection bias	B. Information bias	
	C. Confounding	D. Systematic	
304)	Type of design where both exposure and disease are determined simultaneously for each subject		B
	A. Case study	B. Cross sectional study	
	C. Case control study	D. Cohort study	
305)	A study is conducted to determine the proportion of persons in the population with PTB using AFB sputum for diagnosis		B
	A. Case study	B. Cross sectional study	
	C. Case control study	D. Cohort study	

306)	Randomization is the best approach in designing a clinical trial in order to		B
	A. Achieve predictability	B. Achieve unpredictability	
	C. Achieve blinding	D. Limit confounding	
307)	Type of sampling whereby subjects are assigned according to a factor that would influence the outcome of a study		C
	A. Simple random sampling	B. Systematic sampling	
	C. Stratified random sampling	D. Cluster sampling	
308)	The extent to which a specific health care treatment, service, procedure, program, or other intervention produces a beneficial result under ideal controlled conditions is its		B
	A. Effectiveness	B. Efficacy	
	C. Efficiency	D. Effect modification	
309)	Leading cause of Diarrheal disease		C
	A. Enterotoxigenic Escherichia coli	B. Salmonella (non-typhoid)	
	C. Rotavirus	D. Campylobacter jejuni	
310)	Mammography should be done annually in women of what age?		A
	A. 50 years old and above	B. 60 years old and above	
	C. 45 years old and above	D. 30 years old and above	
311)	Mycobacteria are acid-fast positive bacteria because of		D
	A. Lipopolysaccharide in the bacterial cell wall	B. Mycolic acid in the bacterial cell wall	
	C. The presence of lipids	D. Both B and C options above	
312)	APGAR family assessment is interpreted by means of		A
	A. Scoring	B. Comparing with a standard table	
	C. Using a scale of wellness	D. Consultation with a family psychologist	
313)	Which of the following first-line antibiotics are usually resistant to <i>Mycobacterium tuberculosis</i> ?		B
	A. Isoniazid and ciprofloxacin	B. Isoniazid and Rifampin	
	C. Rifampin and ciprofloxacin	D. Rifampin and streptomycin	
314)	What is the mechanism responsible for antibiotic resistance in <i>M. tuberculosis</i> ?		C
	A. Mutations in DNA gyrase gene	B. Alterations in beta-lactamase	
	C. Mutations in the catalase-peroxidase gene	D. Alterations in RNA polymerase	
315)	All of the following are examples of selective media used for the culture of <i>M. tuberculosis</i> , Except?		D
	A. Inspissated egg media	B. Middlebrook 7H10/7H11 media with antibiotics	
	C. Dubos media	D. Middlebrook 7H10 media without antibiotics	
316)	Which of the following pathogen has the shorter incubation period and is a nontuberculous mycobacterium?		D
	A. <i>Mycobacterium ulcerans</i>	B. <i>Mycobacterium avium</i> complex	
	C. <i>Mycobacterium leprae</i>	D. <i>Mycobacterium fortuitum</i>	
317)	All of the following are the symptoms of pulmonary tuberculosis, EXCEPT?		B
	A. Weakness and fatigue	B. Decreased body temperature	
	C. Weight loss	D. Severe prolonged cough with sputum or blood	
318)	Which of the following bacteria causes lung infection and is the most common non-tuberculous mycobacterial infection associated with AIDS patients?		A
	A. <i>Mycobacterium avium</i> complex	B. <i>Mycobacterium leprae</i>	
	C. <i>Mycobacterium gordonae</i>	D. <i>Mycobacterium gastri</i>	
319)	All of the given are the distinguishing characteristics of <i>Mycobacterium leprae</i> , EXCEPT:		C
	A. It is an acid-fast bacillus	B. It cannot be isolated in-vitro culture method	
	C. It is a human and as well as animal pathogen	D. It can be isolated by only in-vivo culture method	
320)	Which one of the following acid-fast rod bacilli can take up to ten years for its growth in host cells and causes skin infections?		B
	A. <i>Mycobacterium avium</i> complex	B. <i>Mycobacterium leprae</i>	
	C. <i>Mycobacterium tuberculosis</i>	D. <i>Nocardia spp</i>	
321)	Other than <i>Mycobacterium tuberculosis</i> which of the following bacteria causes tuberculosis infection in animals and can be transmitted to humans by consumption of milk and other animal products?		C
	A. <i>Mycobacterium avium</i> complex	B. <i>Mycobacterium leprae</i>	
	C. <i>Mycobacterium bovis</i>	D. <i>Mycobacterium abscessus</i>	
322)	The treatment regimen for initial therapy of tuberculosis caused by <i>M. tuberculosis</i> includes?		D
	A. Streptomycin and rifampin	B. Isoniazid, and ethambutol	

	C. Rifampin, and ciprofloxacin	D. Isoniazid, rifampin, pyrazinamide, and ethambutol	
323)	From the above question (17), which of the following is the correct disease term related to the infection caused by the pathogen?		D
	A. Duodenal ulcer	B. Leprosy	
	C. Buruli ulcer	D. Bairnsdale ulcer	
324)	All of the following are the rapid and confirmatory staining techniques, Except?		C
	A. Ziehl neelsen method	B. Fluorochrome stain	
	C. Dorner method	D. Kinyoun method	
325)	The nitrate reduction test is one of the primary biochemical tests in identifying <i>M. tuberculosis</i> , which of the following biochemical test is useful in the identification of lipase producing <i>M. kansasii</i> and <i>M. marinum</i> ?		A
	A. Tween 80 hydrolysis test	B. Neutral red test	
	C. Tellurite reduction test	D. Bile esculin test	
326)	The concept of Social Medicine was first introduced by		A
	A. Neuman and Virchow	B. Robert Grotjahrr	
	C. John Ryle	D. Rene sand	
327)	Rules of Sanitation in UK is proposed by		B
	A. John Snow	B. Chadwick	
	C. Winslow	D. John Howard	
328)	Best method for collecting vital statistics in India		C
	A. Active surveillance	B. Passive surveillance	
	C. Sentinel surveillance	D. Contact tracing	
329)	Surveillance by WHO is not done for		C
	A. Polio	B. Malaria	
	C. Viral encephalitis	D. Relapsing fever	
330)	Which one of the following branches of Sociology studies the relationship between organism and environment?		C
	A. Ergonomics	B. Social physiology	
	C. Ecology	D. Social pathology	
331)	Primordial prevention is the		D
	A. Prevention of diseases among-the hill - dwelling	B. Human life span to the maximum extent	
	C. Promotion of health and well-being	D. Decreasing risk factors	
332)	What is the definition of society		C
	A. System of social relationship between individuals	B. Social relationship between families	
	C. Intervention of individuals and people	D. Relationship of family and the country	
333)	Which of the following is tertiary level of prevention		D
	A. Health promotion	B. Specific protection	
	C. Early diagnosis and treatment	D. Disability limitation	
334)	All of the following require surveillance according to WHO except		A
	A. Chicken Pox	B. Yellow fever	
	C. Malaria	D. Rabies	
335)	PQLI includes all except		B
	A. Literacy rate	B. Per capita GNP	
	C. IMR	D. Life expectancy at 1 yr	
336)	In a country, socio economic progress is best indicated by		C
	A. Gross net production	B. IMR	
	C. Annual per capital income of the family	D. Death rate	
337)	VftA Prophylaxis in 3-6 years children is an example of		B
	A. Health promotion	B. Specific protection	
	C. Early diagnosis and treatment	D. Disability limitation	
338)	Prophylactic administration of Vitamin A in a child is		C
	A. Health promotion	B. Treatment	
	C. Specific protection	D. Rehabilitation	
339)	The period of pathogenesis is the period		B
	A. Of incubatory processes only	B. Entry of disease-causing agent	
	C. Of subclinical manifestation	D. Onset of disease in man	

340)	The current concept of health promotion and the related activities lead to		B
	A. Better treatment of a problem	B. Critical awareness and lifestyle changes	
	C. Adoption of prophylactic services	D. Better health services usage	
341)	Disease rate is		B
	A. Risk of susceptibility	B. Usually expressed as percentage	
	C. Time period in a calendar year	D. Disease occurrence in a specified time period	
342)	The measure used to express the global burden of disease, i. e. how a healthy life is affected by disease is		A
	A. Disability - Adjusted life year	B. Case fatality rate	
	C. Life Expectancy	D. Age- Specific incidence rate	
343)	Leprosy and tuberculosis are best prevented by		B
	A. Chemoprophylaxis	B. Early diagnosis and treatment	
	C. Influenza	D. Immuno-prophylaxis	
344)	All show iceberg phenomenon except		D
	A. Influenza	B. Polio	
	C. Hepatitis	D. Chicken pox	
345)	Provision of carotene - rich diet in order to prevent xerophthalmia is a measure under		B
	A. Health promotion	B. Specific protection	
	C. Early diagnosis and treatment	D. Rehabilitation	
346)	The concept of "Levels of Prevention" aims at		D
	A. Ascertaining the prognosis of a disease	B. Eradication of a disease	
	C. Preventing epidemics	D. Intervening history of a disease	
347)	The disease which is known as "Father of public health" is		D
	A. Smallpox	B. Rabies	
	C. Plague	D. Cholera	
348)	A list of comments against the World Health Organization' definition of health given. Which of them is not a critics		C
	A. Health is considered a state responsibility	B. No satisfactory definition of well being	
	C. Standards of 'positive' health	D. Utopic rather than realistic goal	
349)	Provision of free medical care to the people at government expense is known as		C
	A. State medicine	B. Social therapy	
	C. Social medicine	D. Social insurance program	
350)	Longitudinal Studies are		A
	A. Are easy to conduct	B. Can detect only one risk factor	
	C. Can find out incidence of disease	D. Have increased bias	

<b>Subject: Public Health Parasitology</b>		<b>MCQ's (351-450)</b>		<b>Answer Key</b>
351)	Pigs or dogs are the source of human infection by each of the following parasites EXCEPT:			B
	A. Echinococcus granulosus	B. Ascaris lumbricoides		
	C. Taenia solium	D. Trichinella spiralis		
352)	Each of the following statements concerning hookworm infection is correct EXCEPT:			D
	A. Hookworm infection is caused by Necator americanus.	B. Hookworm infection can cause anemia.		
	C. Hookworm infection is acquired by humans when filariform larvae penetrate the skin.	D. Hookworm infection can be diagnosed by finding the trophozoite in the stool		
353)	Each of the following statements concerning trichinosis is correct EXCEPT:			D
	A. Trichinosis can be diagnosed by seeing cysts in muscle biopsy specimens.	B. Trichinosis is acquired by eating undercooked pork.		
	C. Eosinophilia is a prominent finding.	D. Trichinosis is caused by a protozoan that has both a trophozoite and a cyst stage in its life cycle.		
354)	Each of the following parasites passes through the lung during human infection EXCEPT:			A
	A. Wuchereria bancrofti	B. Strongyloides stercoralis		
	C. Ascaris lumbricoides	D. Necator americanus		
355)	In malaria, the form of plasmodia that is transmitted from mosquito to human is the			A
	A. Sporozoite	B. Merozoite		
	C. Gametocyte	D. Hypnozoite		
356)	Factors influencing prevalence of parasites include			D
	A. resurgence in vector population	B. poverty and lack of safe drinking		
	C. climate change	D. All of these		
357)	The parasite Sarcocystis suihominis is prevalent			C
	A. Dog	B. Cat		
	C. Pig	D. All of these		
358)	Which one is an emerging water-borne protozoan disease of public health significance?			A
	A. Cryptosporidiosis	B. Toxocariasis		
	C. Taeniasis	D. None of these		
359)	Which one is the important vector borne protozoan zoonotic diseases			D
	A. African trypanosomiasis	B. Chagas disease		
	C. leishmaniasis	D. All of these		
360)	Leishmaniasis has been reported from more than _____ countries.			B
	A. 60%	B. 80%		
	C. 70%	D. 50%		
361)	Common name for the African trypanosomiasis is			C
	A. Nagana	B. sleeping sickness		
	C. Both A and B	D. None of these		
362)	In Babesiosis death generally occurs due to			D
	A. cardiac failure	B. hepatic insufficiency		
	C. renal insufficiency	D. All of these		
363)	The wild rodent P. leucopus acts as an important reservoir for			C
	A. Babesia microti	B. Babesia divergens		
	C. All of these	D. None of these		
364)	The preliminary diagnosis of Babesiosis can be done from clinical signs such as			
	A. Fever	B. High fever with haemoglobinuria		
	C. Haemoglobinuria	D. None of these		
365)	Common Name of Balantidiosis is			A
	A. Ciliary dysentery	B. A and B		
	C. Amoebic dysentery	D. None of these		
366)	Which one is zoonotic			D



	A. Babesiosis	B. Theileriosis	
	C. Anaplasmosis	D. All of these	
367)	Among arthropods, which one considered second in terms of their importance to public health		C
	A. Mosquitoes	B. House fly	
	C. Tick	D. Bugs	
368)	Which one is the most important fish-borne zoonoses prevalent in East Asia		C
	A. Schistosoma mansoni	B. Gastrodiscus hominis	
	C. Clonorchis sinensis	D. eterophes heterophes	
369)	Which food producing animal act as intermediate hosts for Echinococcus granulosus		D
	A. Cattle	B. Sheep	
	C. pig	D. A and B	
370)	Transmission of T. gondii occur by		D
	A. FOOD	B. Water	
	C. Handling raw meat	D. All of these	
371)	Ingestion of contaminated meat from which warm-blooded animal can transmit toxoplasmosis		A
	A. Pig, lamb and chicken	B. Dogs and cats	
	C. Camel and horse	D. Cattle	
372)	A parasitic disease spread between animals and people is called		A
	A. Parasitic zoonosis	B. Protozoonoses	
	C. Cyclozoonoses	D. None of these	
373)	Man is the host of Echinococcus granulosus		C
	A. Final Host	B. Paratinic host	
	C. Accidental Host	D. Intermediate Host	
374)	Intermediate host for Taenia saginata is		B
	A. Pig	B. Cattle	
	C. Dog	D. Man	
375)	Man is the host of Taenia saginata		A
	A. Final Host	B. Paratinic host	
	C. Accidental Host	D. Intermediate Host	
376)	Neurocysticercosis is a preventable parasitic infection caused by larval cysts of		A
	A. Pork Tapeworm	B. Beef Tapeworm	
	C. Pin Tapeworm	D. Dog Tapeworm	
377)	The important cestodes transmitted through food and water includes		D
	A. T. solium	B. D. latum	
	C. E. granulosus	D. All of these	
378)	The definitive host for T. multiceps		D
	A. Cat	B. Man	
	C. Pig	D. Dog	
379)	The parasite that make cyst in different part of human Body is		D
	A. T. solium	B. Beef Tapeworm	
	C. Pork Tapeworm	D. All of these	
380)	All are the species of Taenia Except		D
	A. T. solium	B. Taenia saginata	
	C. T. multiceps	D. T. canis	
381)	The Example of Fish borne Zoonosis is		A
	A. Diphyllbothrium latum	B. Toxoplasma gondii	
	C. Toxocara canis	D. All of these	
382)	Diphyllbothrium latum causes megaloblastic anaemia due to deficiency of vitamin		B
	A. A12	B. B12	
	C. C	D. D	
383)	Dipylidiosis is cause by		D
	A. Pork Tapeworm	B. Beef Tapeworm	
	C. Pin Tapeworm	D. Dog Tapeworm	
384)	Echinococcus developed metacestode stage in visceral organs of man primarily in		D

	A. Lungs	B. Kidney	
	C. Eye	D. A and B	
385)	The disease occurs due to metacestode of <i>E. granulosus</i> is		A
	A. Cystic echinococcosis	B. Alveolar echinococcosis	
	C. A and B	D. All of these	
386)	Alveolar echinococcosis is caused by		B
	A. <i>E. granulosus</i>	B. <i>E. multilocularis</i>	
	C. A and B	D. None of these	
387)	Polycystic echinococcosis is caused by		C
	A. <i>E. vogeli</i>	B. <i>E. oligarthrus</i>	
	C. A and B	D. None of these	
388)	Sparganosis is caused by		B
	A. Nematode	B. Cestode	
	C. Trematode	D. Fungi	
389)	Angiostrongylosis also called		A
	A. Eosinophilic meningitis	B. Eosinophilic dermatitis	
	C. Ocular eosinophilia	D. All of these	
390)	Paratenic host for <i>Angiostrongylus cantonensis</i>		D
	A. Crustaceans	B. Lizards	
	C. Frogs	D. All of these	
391)	<i>Angiostrongylus cantonensis</i> _____ zoonotic nematode parasite of significant public health importance		A
	A. Food borne	B. Air borne	
	C. Water borne	D. All of these	
392)	The parasite <i>A. costaricensis</i> resides in which arteries of caecum of cotton rat		A
	A. Mesenteric	B. Aortic	
	C. Pulmonary	D. None of these	
393)	Anisakiasis is a parasitic disease which is caused by		A
	A. Nematode	B. Cestode	
	C. Trematode	D. Protozoan	
394)	All are zoonotic parasite except		C
	A. <i>Angiostrongylus cantonensis</i>	B. <i>Toxoplasma gondii</i>	
	C. <i>Ascaris lumbricoides</i>	D. <i>Echinococcus granulosus</i>	
395)	Toxoplasmosis is infection with <i>Toxoplasma gondii</i> . The only known hosts of this organism are domestic cats and their relatives. Infection with <i>T. gondii</i> in humans can occur in various ways. Which of the following is the most common mode of infection in humans?		B
	A. Blood transfusion	B. Ingestion of oocysts	
	C. Ingestion of tissue cysts	D. Transplacental transmission	
396)	Infection with <i>T. gondii</i> can manifest in many different ways. Which of the following types of toxoplasmosis results from congenital infection that is reactivated in a patient's late teens or 20s?		D
	A. Acute	B. CNS	
	C. Disseminated	D. Ocular	
397)	A patient experiences persistent diarrhea, abdominal pain, and weight loss. Which of the following is a likely diagnosis?		D
	A. Chagas' disease	B. amebic encephalitis	
	C. visceral leishmaniasis	D. balantidiasis	
398)	Protozoa in which of the following genera does NOT cause brain infections?		B
	A. <i>Acanthamoeba</i>	B. <i>Leishmania</i>	
	C. <i>Naegleria</i>	D. <i>Entamoeba</i>	
399)	Tsetse flies can carry which of the following pathogens?		A
	A. <i>Trypanosoma brucei</i>	B. <i>Plasmodium falciparum</i>	
	C. <i>Trypanosoma cruzi</i>	D. <i>Giardia intestinalis</i>	
400)	The cyclical waves of parasitemia associated with <i>Trypanosoma brucei</i> infections are related to _____.		D
	A. trypanosome toxins	B. the host inflammatory response	
	C. immunosuppressive effects of the parasite	D. antigenic variation	
401)	All of the following have a preference for the intestinal tract EXCEPT _____.		C

	A. Balantidium	B. Entamoeba	
	C. Trichomonas	D. Giardia	
402)	Which of the following is NOT a characteristic of all apicomplexan parasites?		B
	A. They form nonmotile, sporelike shapes.	B. They infect the bloodstream.	
	C. They are parasites of animals.	D. They require two types of hosts to complete their life cycles.	
403)	What is thought to be the major source of Toxoplasma infection for humans?		A
	A. ingestion of undercooked meat	B. sexual activity	
	C. contact with infected cats and their feces	D. bites from infected arthropods	
404)	Which of the following parasites can cross the placenta in women?		B
	A. Cryptosporidium	B. Toxoplasma	
	C. Plasmodium	D. Cyclospora	
405)	Why are humans a "dead end" for the tapeworm Taenia solium?		C
	A. T. solium is killed by the normal microbiota of the human intestinal tract.	B. T. solium larvae have no way of leaving the human digestive tract.	
	C. Normally, humans are not cannibals.	D. Humans lack an important growth factor for further development of the tapeworm.	
406)	Tapeworms use their scolex for which of the following?		C
	A. asexual reproduction	B. sexual reproduction	
	C. anchorage	D. ingesting nutrients	
407)	Cysticerci are found in which type of host of a cestode?		D
	A. Neither the definitive nor the intermediate host	B. both the definitive and the intermediate host	
	C. only the definitive host	D. only the intermediate host	
408)	Which of the following tapeworms has an affinity for the liver in human body?		A
	A. Echinococcus granulosus	B. Taenia solium	
	C. Taenia saginata	D. Schistosoma mansoni	
409)	In the generalized life cycle of fluke larvae, cercariae can parasitize all of the following EXCEPT _____.		D
	A. the bloodstream	B. the liver	
	C. the lungs	D. the brain	
410)	The deposition of eggs in the perianal area is a characteristic of which of the following?		A
	A. Enterobius vermicularis	B. Fasciola hepatica	
	C. Ascaris lumbricoides	D. Wuchereria bancrofti	
411)	The condition elephantiasis is associated with infections of which of the following?		A
	A. Wuchereria bancrofti	B. Necator americanus	
	C. Schistosoma japonicum	D. Fasciola gigantica	
412)	Which of the following organisms is associated with the propagation and transmission of schistosomiasis?		A
	A. snails	B. dogs	
	C. mosquitoes	D. cats	
413)	The disease occurs due to Baylisascaris procyonis, the intestinal roundworm of		C
	A. cat	B. pig	
	C. raccoons	D. Man	
414)			D
	A. Taeniasis	B. Anisakiasis	
	C. Trichinellosis	D. cryptosporidium	
415)	All are meat borne parasitic diseases Except		A
	A. Taeniasis	B. Anisakiasis	
	C. Trichinellosis	D. Diphyllbothriasis	
416)	The scientist 'Van Thiel' for first time recognized Anisakiasis in _____		C
	A. 1980	1970	
	C. 1960	1950	
417)			A
	A. Ascaris suum	B. Ascaris lumbricoides	
	C. A and B	D. None of these	
418)	Capillaria hepatica is a _____ parasite		A

	A. Nematode	B. Cestode	
	C. Trematode	D. None of these	
419)	Fish-eating birds act as the _____ hosts for intestinal capillariasis		B
	A. paratenic	B. reservoir	
	C. Final	D. intermediate	
420)	An intermediate host whose presence may be required for the completion of a parasite's life cycle but in which no development of the parasite occurs.		C
	A. Reservoir host	B. Definitive host	
	C. Paratenic host	D. All of these	
421)	Capillaria aerophila causes _____ capillariasis and related symptoms.		A
	A. pulmonary	B. intestinal	
	C. ocular	D. Cutaneous	
422)	Cutaneous larva migrans (CLM) occurs due to subcutaneous migration of the _____ larvae		A
	A. Nematode	B. Cestode	
	C. Trematode	D. Protozoan	
423)	_____ act as reservoir for the Strongyloides spp infection.		C
	A. Cats	B. Cattle	
	C. Dogs	D. Sheep	
424)	Hookworms are		A
	A. Nematode	B. Cestode	
	C. Trematode	D. Tapeworm	
425)	Dioctophyma renale large nematode also known as the giant _____		B
	A. Kidney fluke	B. Kidney worm	
	C. Liver fluke	D. Liver worm	
426)	The mink (Mustela vison) is considered to be the main reservoir and definite host and humans and dogs are thought to be _____ hosts for Dioctophyma renale.		D
	A. Reservoir host	B. Definitive host	
	C. Paratenic host	D. Accidental/terminal	
427)	Gnathostomiasis is important _____ zoonosis of public health significance.		C
	A. Air -borne	B. Soil -borne	
	C. Food -borne	D. None of these	
428)	All are Intermediate hosts Except		D
	A. fish	B. chicken	
	C. snakes	D. cattle	
429)	Strongyloidiasis is also known as _____.		A
	A. threadworm infection	B. pinworm infection	
	C. headworm infection	D. birdworm infection	
430)	The zoonotic potential of Strongyloides fuelleborni is believed to be much _____ than Strongyloides stercoralis		A
	A. higher	B. lower	
	C. equal	D. Both are not zoonotic	
431)	Strongyloid infections can also cause _____ in man which can be zoonotic in nature.		C
	A. hepatitis	B. rumenitis	
	C. dermatitis	D. None of these	
432)	Humans are _____ for S. stercoralis infections		A
	A. Reservoir host	B. Definitive host	
	C. Paratenic host	D. None of these	
433)	Thelazia callipaeda is a helminth responsible for causing _____ infection in humans and animals		B
	A. nose	B. eye	
	C. ear	D. head	
434)	The secretophagous flies play central role in transmission of Thelazia callipaeda		D
	A. Tsetse fly	B. Sand fly	
	C. House flies	D. secretophagous flies	
435)	High numbers of Trichinella larvae are present in _____		D

	A. Diaphragm	B. Tongue	
	C. Masseter muscles	D. All of these	
436)	Trichinella larvae make _____ cells in the muscle		A
	A. nurse	B. lady	
	C. doctor	D. larva	
437)	Animals act as reservoirs for most of the Trichostrongylus species.		B
	A. omnivorous	B. Herbivorous	
	C. carnivorous	D. None of these	
438)	Trichocephaliasis is known as _____		C
	A. threadworm infection	B. pinworm infection	
	C. Whipworm disease	D. hookworm	
439)	Rarely, T. vulpis is responsible for causing _____ in man.		A
	A. visceral larva migrans	B. cutaneous larva migrans	
	C. ocular larva migrans	D. All of these	
440)	A primary host that harbors the pathogen but shows no ill effects and serves as a source of infection		A
	A. Reservoir host	B. Definitive host	
	C. Paratenic host	D. None of these	
441)	Clinical symptoms of Toxocariasis in man can be discussed under _____ different forms		C
	A. 2	B. 3	
	C. 4	D. 5	
442)	_____ can act as reservoir hosts for human hookworm infections		B
	A. cats	B. Dogs	
	C. fox	D. chicken	
443)	Zoonotic filariasis is a vector borne disease and blood sucking insects act as _____ vectors for transmission of the disease		A
	A. biological	B. mechanical	
	C. genetical	D. clonal	
444)	Dirofilaria immitis, also known as _____		B
	A. Cat heartworm	B. Dog heartworm	
	C. Human heartworm	D. None of these	
445)	Tick infestations could lead to _____		D
	A. paralyses	B. allergic reactions	
	C. toxicities	D. All of these	
446)	Are any attributes, characteristics or exposure of an individual that increases the likelihood of developing a disease or injury is called _____		A
	A. Risk factors	B. accident	
	C. incident	D. None of these	
447)	The level of a pathogen in a population, as measured in blood serum is called _____		A
	A. Seroprevalence	B. prevalence	
	C. mesoprevalence	D. All of these	
448)	All are major neglected parasitic infections except		B
	A. toxocariasis	B. trypanosomiasis	
	C. trichomoniasis	D. toxoplasmosis	
449)	All are soil-born except		C
	A. Ascaris lumbricoides	B. Trichuris trichiura	
	C. Toxocara canis	D. Anclostoma duodenale and Necator americanus	
450)	The diseases which normally present in humans but could be transmitted to animals is called _____		C
	A. Anthroozoonoses	B. Amphixenosis	
	C. Zooanthroponoses	D. None of these	

<b>Subject: Toxicology and Pharmacology MCQ's (451-</b>		<b>Answer Key</b>
451)	Type I ADR reactions is _____ A. Caused when T-cells bind to a specific antigen B. Caused by tissue injury C. IgE mediated D. Caused by cytotoxic antibodies	C
452)	The incidence ADR is highest in _____. A. Children B. Elderly C. Women D. Men	B
453)	_____ is contraindicated during pregnancy due to its Teratogenicity. A. Folic acid B. Calcium C. Retinol D. Iron	C
454)	The most specific & sensitive method for assessment of compliance can be used to detect potent therapeutic agent in body fluids is A. Drug analysis B. Interrogation C. Urine marker. D. Residual Tablet counting.	A
455)	Which of the following reaction is called Augmented adverse drug reactions? A. Genetically determined effects. B. Idiosyncrasy C. Rebound effect on discontinuation D. Allergic reactions & anaphylaxis.	C
456)	_____ causes pharmacodynamic drug interaction. A. Gastric motility changes B. Stimulation of metabolism C. Alteration of pH of GIT. D. Interactions at receptor site	D
457)	The age related physiological change in geriatric patient which may affect drug distribution is A. Increased body mass. B. Increased total body water. C. Increased total body fat. D. Increased serum albumin level.	B
458)	_____ absorption in infants and children is noticeably faster than in neonatal period. A. Oral. B. Topical C. Intravenous D. Intramuscular	A
459)	Autonomy in clinical studies is defined as A. Freedom, dignity and confidentiality of the subject; right to choose i.e. whether or not to participate in the trial or to continue with it. B. Motive to do good to the subject and/or the society at large. C. Not to do harm or put the participant at undue risk/disadvantage. D. Observance of fairness, honesty and impartiality in obtaining, analyzing & communicating the data.	A
460)	_____ drug is usually avoided with breastfeeding. A. Ibuprofen B. propranolol C. Methotrexate D. Naproxen	C
461)	The sponsor in clinical study is A. Country B. Organization C. Society D. Cohort	B
462)	Science of collecting, monitoring, researching, assessing and evaluating information from healthcare providers and patients on the adverse effects of medications is known as A. Pharmacovigilance B. Clinical Trails. C. Observational study. D. Qualitative study.	A
463)	An epidemic that becomes unusually widespread and even global in its reach is referred to as A. Pandemic B. Hyperendemic C. Spanish flu. D. Endodermic	A
464)	The comparison of bioavailability between two dosage forms is refereed as _____ A. Bioavailability B. Biopharmaceutics C. Biological D. Bioequivalence	D
465)	The highest serum drug concentration following a single dose or at a steady state within a dosing interval is called .....	B

	A. Lead	B. Peak	
	C. Poison	D. Mechanisms	
466)	The substantial degradation of an orally administered drug caused by enzyme metabolism in the liver before the drug reaches the systemic circulation.		A
	A. First-pass metabolism	B. Disposition	
	C. Antagonist	D. Hydrophilic	
467)	Pharmaceutical equivalent that produce the same effects in patients		A
	A. Therapeutic equivalent	B. Therapeutic window	
	C. Minimum effective concentration (MEC)	D. Minimum toxic concentration (MTC)	
468)	How are prescription medicines different from OTC ones?		C
	A. They contain much smaller amounts of active ingredients	B. They don't contain dyes or preservatives	
	C. They're unsafe for use without medical supervision	D. They can be toxic	
469)	The _____ is the heart of the patient counselling session		C
	A. Preparing for the session.	B. Opening the session.	
	C. Counselling content.	D. Closing the session.	
470)	What is informed consent in a clinical trial?		D
	A. The subjects do not know which study treatment they receive	B. Patients injected with placebo and active doses	
	C. Fake treatment	D. Signed document of the recruited patient for the clinical trial procedures	
471)	Case control studies is called as		B
	A. Drug-oriented systems.	B. Dose-oriented systems.	
	C. Disease-oriented systems.	D. Complication-oriented systems.	
472)	_____ of clinical trial involves first time human trial in a small number of patients.		A
	A. Phase I	B. Phase II	
	C. Phase III	D. Phase IV	
473)	The purpose of preclinical testing is:		A
	A. To verify that a drug is sufficiently safe and effective to be tested in humans.	B. To undergo preliminary testing in healthy humans to monitor the effects of the drug.	
	C. To create a basic outline for the larger scale future tests on a widespread population.	D. To develop method of drug analysis	
474)	Which of the following terms does not describe an Adverse Drug Reaction?		D
	A. Idiosyncrasy	B. Anaphylaxis	
	C. Teratogenic effect	D. Placebo effect	
475)	Patient counselling in pharmaco-epidemiology helps to		C
	A. Know chemical structure of drug	B. Develop business relations with pharmacist	
	C. Motivate the patient to take medicine for improvement of his/her health status.	D. Pass time at old age	
476)	Pharmacovigilance is done for monitoring of		C
	A. Drug price	B. Unethical practices	
	C. Drug safety	D. Pharmacy students	
477)	Which of the following statements best describes a lead compound?		
	A. A compound that contains the element lead	B. A compound from the research laboratory that is chosen to go forward for preclinical and clinical trials.	
	C. A molecule that shows some activity or property of interest and serves as the starting point for the development of a drug.	D. The first compound of a structural class of compounds to reach the market.	
478)	Prophylactic administration of vitamin k in breast fed babies is an example of		C
	A. Health promotion	B. treatment	
	C. Specific protection	D. rehabilitation	
479)	Early diagnosis and prompt treatment in pharmacoepidemiology is focused on		A
	A. Disease identification	B. Host factor	
	C. Environmental factor	D. Behavior modification	

480)	Study of dosages of drugs is called			C
	A. Health promotion	B. Treatment		
	C. Posology	D. None of all		
481)	Chemical constituent of the drug which is the reason for its therapeutic effect is called			C
	A. Excipient	B. Odd compound		
	C. Active principle	D. None of all		
482)	If a drug has No active principle just excipients it is			C
	A. drug	B. Opioids		
	C. Placebo	D. None of all		
483)	Presystemic metabolism of administered drug is called			A
	A. First pass metabolism	B. Renal removal		
	C. dialysis	D. None of all		
484)	Unchanged fraction or percentage of administered drug that reaches systemic circulation is			B
	A. Excretion	B. Bioavailability		
	C. Elimination	D. Administration		
485)	Movement of drug or processes involved in movement of drug from site of administration to systemic circulation			D
	A. Excretion	B. Bioavailability		
	C. Elimination	D. Absorption		
486)	Outcomes of metabolism of drug result in			D
	A. Active to inactive drug	B. lipid soluble to water soluble		
	C. Inactive to active prodrug	D. All of all		
487)	Half life determines which parameter/s			A
	A. Time to reach steady state conc and dosage interval	B. Time to reach steady state conc		
	C. dosage interval	D. None of all		
488)	The following has an impact on Health technology			D
	A. Equipments	B. Instrument		
	C. Drugs	D. All of all		
489)	The survival in public health			B
	A. humanistic outcome	B. Clinical outcome		
	C. Humanistic outcome	D. None of all		
490)	The following is patient prospective except			D
	A. Clinical Cure	B. Quality of life		
	C. Out-of-pocket	D. Satisfaction with treatment process		
491)	Ms. KAMANA went to medical clinics where the doctors choose to prescribe amoxicilline generic instead of amoxy-denk because the doctors found that Ms kamana has no medical insurance to afford amoxy-denk while the clinical outcome is the same. what type of health economic evaluation is in this statement.			C
	A. cost utility analysis	B. cost effectiveness analysis		
	C. cost minimization analysis	D. All of all		
492)	According to health care purpose , the technology should be grouped as following excepts			C
	A. prevention like immunization	B. screening like mammography		
	C. diagnosis like antiviral therapy	D. treatment like psychotherapy		
493)	A patient requires a high dose of a new antihypertensive medication because the new medication has a significant first-pass effect. What does this mean?			C
	A. The medication must pass through the patient's bloodstream several times to generate a therapeutic effect.	B. The medication passes through the renal tubules and is excreted in large amounts.		
	C. The medication is extensively metabolized in the patient's liver.	D. The medication is ineffective following the first dose and increasingly effective with each subsequent dose.		
494)	The following drug trial is synonymous with the term "clinical trial"			B
	A. Clinical pharmacology and toxicology	B. Full scale evaluation of treatment		
	C. Initial clinical investigation for treatment effect	D. None of all		
495)	Which of the following is not secreted from the anterior hypophysis			C
	A. Thyroid stimulating hormone	B. Renocorticotropin		
	C. oxytocin	D. Follicle stimulating hormone		



496)	Long term treatment of hyperglycemia does not include		C
	A. Bisphosphonates	B. Calcitonin	
	C. Hydration	D. Loop diuretics	
497)	Which medication should be avoided in thyroid storm		D
	A. Beta blocker	B. Glucocorticoid	
	C. Insulin	D. None of all	
498)	Potassium, sodium, chloride are		B
	A. Catecholamines	B. Electrolytes	
	C. Enzymes	D. Steroids	
499)	Which of the following is a measure of blood sugar after 4 or more hours of no food		A
	A. Fasting glucose	B. Glucose tolerance test	
	C. Microalbumin test	D. Thyroid function test	
500)	Insulin is produced and external insulin medication is given to compensate the natural one produced form		
	A. Gall bladder	B. Liver	
	C. Kidney	D. Pancreas	
501)	Primary target site of aflatoxin B1 (AFB1) in animals		A
	A. Liver	B. Lungs	
	C. Bursa	D. Lymph nodes	
502)	Enzyme showed a strong correlation in metabolic activation of AFB1		C
	A. Alkaline Phosphatase	B. Gamma-glutamyl transferase	
	C. Cytochrome P450	D. Alkaline Transaminase	
503)	Which one is more resistant to Mycotoxins		D
	A. Humans	B. chicken	
	C. Rat	D. Sheep	
504)	Major Aflatoxins found in milk		C
	A. AFB1	B. AFB2	
	C. AFM1	D. AFG1	
505)	Balkan endemic nephropathy (BEN) and other renal anomalies associated with		A
	A. Ochratoxin A	B. Aflatoxins	
	C. ZEN	D. DON	
506)	..... also used as biological agent		A
	A. Trichothecenes	B. Ochratoxin A	
	C. Aflatoxin	D. Zearalenone	
507)	Acceptable level of AFM1 in milk is .....		B
	A. 1.00 ppb	B. 0.05 ppb	
	C. 0.09 ppb	D. 1.5 ppb	
508)	Which test is based on the detection of specific mycotoxin structure through specific antibody		B
	A. Lateral Flow Immunoassay (LFIA)	B. Enzyme linked immuno-sorbent assay (ELISA)	
	C. Fluorescence polarization immunoassay (FP)	D. Biosensor methods	
509)	AFB1 inhibits the expression of .....		C
	A. IL-3	B. IL-8	
	C. IL-4	D. IL-2	
510)	All are physical methods for removal of Mycotoxins <b>Except</b> .....		D
	A. Ionizing radiation	B. Heat	

	C. Thermal degradation	D. Ozone treatment	
511)	Conditions favorable for Fungal growth		A
	A. Temp 26°C; Humidity 70%.	B. Temp 17°C; Humidity 50%.	
	C. Temp 50°C; Humidity 70%.	D. Temp 50°C; Humidity 90%.	
512)	Hypoestrogenism is related to which Mycotoxins:		B
	A. Aflatoxins B1	B. Zearalenone	
	C. Ochratoxin A	D. Deoxynivalenol	
513)	Which mycotoxin is the possible cause of equine leukoencephalomalacia:		A
	A. <i>F. verticillioides</i>	B. <i>A. flavus</i>	
	C. <i>A. parasiticus</i>	D. <i>S.typhi</i>	
514)	Degradation of mycotoxins into non-toxic metabolites by using bacteria/fungi or enzymes is called		A
	A. Biotransformation	B. Bioremediation	
	C. Conjugation	D. Transduction	
515)	.....yeast can be used as adsorbents for mycotoxins		A
	A. <i>Saccharomyces cerevisiae</i>	B. <i>Cryptococcus neoformans</i>	
	C. <i>Candida tropicalis</i>	D. None	
516)	All are in-organic mycotoxins binders <b>Except</b>		C
	A. Zeolites	B. Bentonites	
	C. Yeast cell wall	D. Clays	
517)	Disrupted sphingolipid synthesis is associated with toxicity of .....		B
	A. AFB1	B. FB1	
	C. OTA	D. DON	
518)	Which one is structurally similar to estradiol and produce reproductive problems		A
	A. ZEN	B. DON	
	C. FB1	D. AFB1	
519)	Reye's syndrome in children associated with toxicity of .....		D
	A. Ochratoxin	B. Fumonisin	
	C. Zearalenone	D. Aflatoxins	
520)	IARC classified the Fumonisin B1 to		A
	A. Group 2B	B. Group 3B	
	C. Group 1B	D. Group 4B	
521)	Toxin associated with Esophageal cancer in humans is .....		C
	A. Ochratoxins	B. Aflatoxins	
	C. Fumonisin	D. Zearalenone	
522)	Nephritis, Hepatomegaly, genotoxicity and immunosuppression in poultry is associated with		A
	A. Ochratoxins	B. Aflatoxins	
	C. Fumonisin	D. Zearalenone	
523)	Maximum tolerable level of mercury for poultry is only:		B
	A. 0.2 ppm	B. 2 ppm	
	C. 3 ppm	D. 4 ppm	
524)	Cd levels in forages and cereals should be lower than		A
	A. 1 mg/kg	B. 0.5 mg/kg	
	C. 1.5 mg/kg	D. 2 mg/kg	
525)	..... is required in the structure of B12 vitamin and its derivatives for animals and humans		D
	A. Mercury	B. Zinc	

	C. Copper	D. Cobalt	
526)	The recommended amount of Arsenic in poultry feed is:		C
	A. 0.2 and 0.50 mg/kg	B. 1.2 and 5.0 mg/kg	
	C. 0.012 and 0.050 mg/kg	D. 2.0 and 0.0050 mg/kg	
527)	Primary route for the transfer of ARSENIC and exposure of animals to its toxic effects is ....		B
	A. Air	B. water	
	C. Feces	D. Secretions	
528)	The toxic dose of Arsenic in poultry feed is:		A
	A. 40 and 50 mg/kg	B. 10 and 20 mg/kg	
	C. 70 and 80 mg/kg	D. 20 and 90 mg/kg	
529)	Ducks are particularly sensitive to which Toxin:		D
	A. Ochratoxin	B. DON	
	C. ZEN	D. Aflatoxins	
530)	Chickens can tolerate lead concentrations without affecting the rate of weight gain is:		B
	A. 200 mg/kg	B. 500 mg/kg	
	C. 300 mg/kg	D. 100 mg/kg	
531)	Maximum tolerable level of zinc in poultry is:		D
	A. 2000 ppm	B. 500 ppm	
	C. 250 ppm	D. 1000 ppm	
532)	Naturally occurring mixtures of aflatoxins were classified as:		C
	A. Class 2 carcinogenic	B. Class 3 carcinogenic	
	C. Class 1 carcinogenic	D. Class 3 carcinogenic	
533)	which mycotoxin is primarily found in apple and grape juices?		C
	A. Aflatoxin	B. ZEN	
	C. Patulin	D. FB1	
534)	The thermal natural zone for Poultry ranges from:		D
	A. 18°C to 34°C	B. 14°C to 29°C	
	C. 10°C to 28°C	D. 13°C to 24°C	
535)	Floor space required for chick during first week in artificial brooder is:		B
	A. 150 – 180 sq cms	B. 100 – 120 sq cms	
	C. 200 – 250 sq cms	D. None	
536)	Photoperiod of layer should be:		C
	A. 18 – 20 hrs	B. 8 – 10 hrs	
	C. 14 – 16 hrs	D. 24 hrs	
537)	Gizzard is an organ of:		A
	A. Grinding	B. Absorption	
	C. Excretion	D. Digestion	
538)	Peak egg production in chickens is achieved at:		D
	A. 22 – 42 weeks	B. 10 – 22 weeks	
	C. 16 – 20 weeks	D. 24 – 30 weeks	
539)	Factors responsible for anti-nutrition present in cotton seed cake:		A
	A. Gossypol	B. Aflatoxin	
	C. Ochratoxin	D. None	

540)	Encephalomalacia occurs in poultry due to deficiency of:				B
	A.	Vit D2	B.	Vit E	
	C.	Vit K	D.	Vit A	
541)	Colour of Egg shell in poultry is due to:				C
	A.	Cholesterol	B.	Calciferol	
	C.	Porphyrin	D.	None	
542)	which is a part of ovary and oviduct of chicken being functional:				A
	A.	Left	B.	Right	
	C.	Lower right	D.	Lower left	
543)	Crop milk is produced in:				D
	A.	Quails	B.	Chicken	
	C.	Parrots	D.	Pigeons	
544)	Curled toe paralysis in chicks is observed due to deficiency of .....				A
	A.	Riboflavin	B.	Thiamine	
	C.	Pantothenic acid	D.	Vit. A	
545)	which one of the following acts as antioxidant in feed?				C
	A.	Copper	B.	Manganese	
	C.	Selenium	D.	None	
546)	The Elimination of unproductive or diseased birds from flock is known as:				C
	A.	Nulling	B.	Debudding	
	C.	Culling	D.	Roasting	
547)	For heavy breed of chicken, the ratio of male and female for the proper fertilization of egg should be:				A
	A.	1: 8 - 10	B.	1: 12 - 14	
	C.	1: 14 - 15	D.	1: 16 - 18	
548)	The relative humidity during breeding should be:				A
	A.	50 – 60 %	B.	75 – 80 %	
	C.	85 %	D.	Below 50 %	
549)	Liver is target organ in:				A
	A.	AFB1	B.	OTA	
	C.	ZEN	D.	None	
550)	Kidney is target organ in:				D
	A.	AFB1	B.	ZEN	
	C.	DON	D.	OTA	

<b>Subject: Human and Animal Physiology</b>				<b>(Mcq's 551-700)</b>		<b>Answer Key</b>
551)	The epithelium is called simple epithelium on the basis				A	
	A.	Number of cell layers	B.	Shape of cells		
	C.	Size of cells	D.	Location of cells		
552)	Animal possess canal system				B	
	A.	Annelids	B.	Sponges		
	C.	Echinoderms	D.	Mollusca		
553)	Pulmonary artery originates from				D	
	A.	Right auricle	B.	Left auricle		
	C.	Left ventricle	D.	Right ventricle		
554)	Which organ receives only oxygenated blood?				C	
	A.	Lung	B.	Liver		
	C.	Spleen	D.	Gill		
555)	Open vascular system is usually found in _____				A	
	A.	Crabs	B.	Humans		
	C.	Monkeys	D.	Crows		
556)	Where are Haversian canals found?				A	
	A.	Humerus	B.	Vili		
	C.	Medula	D.	None of the above		
557)	An example of a tetrapod is				B	
	A.	Flesh fly	B.	Hummingbird		
	C.	Tarantula	D.	Blue-ringed octopus		
558)	Humans have ____ bones in the vertebrate column				C	
	A.	52	B.	32		
	C.	33	D.	53		
559)	Which is the largest cell in human body?				C	
	A.	Macrophage	B.	Granule cell		
	C.	Ovum	D.	None of the above		
560)	Where are histamine-secreting cells found?				B	
	A.	Nervous tissue	B.	Connective tissue		
	C.	None of the above	D.	Areolar tissue		
561)	Which of the following is an amniote?				B	
	A.	Leaf green tree frog	B.	Crow		
	C.	Japanese giant salamander	D.	None of the above		
562)	What are osteocytes?				B	
	A.	A type of white blood cell	B.	A type of bone cell		
	C.	A type of brain cell	D.	None of the above		
563)	In central themes of physiology, we study					

	A. Structural -function relationship	B. Adaptation	D
	C. Conformity	D. All above	
564)	At macroscopic level, _____ and _____ of body form discrete functional compartments.		C
	A. Tissue, Organs	B. Cell membrane, cytosol	
	C. Mitochondria, ER	D. Organ system, Organelle	
565)	Terrestrial animals face _____ and _____ temperature		D
	A. Cool, cool	B. Cool, intermediate	
	C. Hot, Intermediate	D. Hot, cool	
566)	Which of the followings is the site of core glycosylation of secretory proteins?		A
	A. RER	B. Mitochondria	
	C. SER	D. Golgi complex	
567)	Striated ducts in sub-lingual salivary glands are not present in		B
	A. Horse	B. Dog	
	C. Ox	D. Sheep	
568)	Tuber calcanei is grooved in		C
	A. Horse	B. Dog	
	C. Ox	D. Pig	
569)	Broad ligament in mare has attachment with		B
	A. Lateral abdominal wall	B. Sub lumbar region in mare	
	C. With caudal wall	D. With chest wall	
570)	How many branches of transverse process are present in sixth cervical vertebra of horse?		B
	A. 5	B. 3	
	C. 7	D. 9	
571)	A rounded spleen is present in the body of		B
	A. Dog	B. Chicken	
	C. Goat	D. Mare	
572)	The mucous membrane of the palate bears following epithelium in birds		A
	A. Stratified Squamous	B. Simple squamous	
	C. Stratified Squamous	D. keratinized	
573)	Dry matter required by cow of 400 kg body weight should be (per day)		A
	A. 10Kg	B. 2.5Kg	
	C. 20Kg	D. 0.5Kg	
574)	Small ruminant contribution towards total meat production of the country is		B
	A. 10%	B. 33%	
	C. 20%	D. 50%	
575)	Mark the optimum age for castration of male calves by bloodless castration method		D
	A. 2 months	B. 2-3 months	
	C. 3-4 months	D. 4-6 months	
576)	In general, low percentage of infertility occurs in younger animals but increase in case of older cows which is approximately:		A
	A. 2-3%	B. 4-5%	
	C. 3-4%	D. 5-6%	
577)	If cow gets excited or disturbed at milking time the "Hold-up" of milk occurs, it is due to release		C
	A. Oxytocin	B. Progesterone	
	C. Adrenalin	D. Renin	
578)	Clinical signs such as vesicle on lips, muzzle, dental pad, tongue, gingivae, interdigital spaces, and teats, and reluctant to eat and walk are common in cows/buffaloes with:		A
	A. FMD	B. IBR	
	C. BVD	D. MDC	
579)	Horse shoe crab amebocytes test is used for determination of		A
	A. Endotoxin	B. Virus	
	C. Bacteria	D. Uric acid	
580)	When a dog or cat is spayed, the surgical incision is most commonly made		D

	A. Midline, cranial to the umbilicus	B. In the left inguinal region	
	C. In the right inguinal region	D. Midline, caudal to the umbilicus	
581)	What is the minimum number of throws required when making a surgical knot?		C
	A. 1	B. 3	
	C. 2	D. 4	
582)	Regarding the bone grafting, the bone graft that is taken from the animal of same species as that of patient is called as		A
	A. Homograft	B. Xenograft	
	C. Autograft	D. Hetrograft	
583)	While investigating a point source epidemic it was found that 120 students ate five different foods (meat burgers, fried fish, steak, rice and fruit salad). The relative risk was calculated for all those five foods. It was concluded that fish was not responsible for this epidemic. The relative risk of fish is:		A
	A. 0.7	B. 1.7	
	C. 1.2	D. 3.0	
584)	First site of entry of antigen is		B
	A. Antibody molecules	B. Unbroken skin	
	C. Antigen molecules	D. Phagocytic cells	
585)	The time temperature combination for HTST pasteurization of 71.1°C for 15 sec is selected on the basis of :		A
	A. <i>Coxiella Buurnetii</i>	B. <i>B. subtilis</i>	
	C. <i>E.Coli</i>	D. <i>C.botulimum</i>	
586)	Which reaction in DNA replication is catalysed by DNA ligase?		D
	A. Addition of new nucleotides to the lagging strand.	B. Addition of new nucleotides to the leading strand	
	C. Base pairing of the template and the newly formed DNA strand	D. Formation of a phosphodiester bond between the 3'-OH of one Okazaki fragment and the 5'-phosphate of the next on the lagging strand	
587)	Endotoxins are heat stable lipopolysaccharide-protein complexes which form the structural components of the cell wall of bacteria. Which of the following statement regarding endotoxin is correct?		A
	A. all have the same effect regardless of bacterial source	B. are found in both gram positive and gram-negative bacterial cell wall	
	C. are part of the cell wall of gram-positive bacteria only	D. none of the above statement is correct	
588)	A typical growth curve consists of 4 phases. Which is the correct sequence?		C
	A. exponential, lag, stationary, death	B. stationary, exponential, lag, death	
	C. lag, exponential, stationary, death	D. lag, stationary, exponential, death	
589)	All is true about agar slant except:		B
	A. Slope form	B. For anaerobic bacteria	
	C. Preservation of cultures	D. Solid medium	
590)	A dog presents to your clinic for an acute onset of sneezing after running in a field. You look into the dog's nasal passage and remove a grass awn. What bacterial infection is this dog predisposed to?		C
	A. <i>Nocardia</i>	B. <i>Pasteurella multocida</i>	
	C. <i>Actinomyces</i>	D. <i>Clostridium tetani</i>	
591)	A type III Salter Harris fracture involves what part of the bone?		C
	A. Metaphysis and physis	B. Metaphysis, physis, and epiphysis	
	C. Epiphysis and physis	D. Metaphysis and epiphysis	
592)	Meibomian glands produce which portion of the tear film?		D
	A. Aqueous	B. Immunoglobulins	
	C. Mucous	D. Lipid	
593)	Most common tumor of mare reproductive tract is		D
	A. Mellanoma	B. Squamous cell carcinoma	
	C. Sarcoid	D. Granulosa cell tumor	
594)	To achieve a normal pregnancy, the blastocyst attaches to what structure?		A
	A. Endometrium	B. Oviduct	
	C. Placenta	D. Cervix	
595)	A dog has swallowed a ball, and it is stuck in its stomach. What is the name of the surgical procedure performed to remove it?		B

	A. Gastrectomy	B. Gastrotomy	
	C. Gastrostomy	D. Gastropexy	
596)	An <i>expectorant</i> is a drug that acts to		C
	A. Suppress a productive cough	B. Suppress inflammatory cells in the respiratory tract	
	C. Liquefy and dilute viscous secretions in the respiratory tract	D. Reduce the allergic	
597)	Creatinine concentrations in serum are influenced by		A
	A. Hydration level	B. Liver disease	
	C. Amylase concentration	D. Insulin production	
598)	EDTA plasma cannot be used for testing ____ plasma levels because EDTA forms a complex with it.		B
	A. Magnesium	B. Calcium	
	C. Phosphorus	D. Potassium	
599)	The fecal solution most likely to be successful in detecting <i>Giardia</i> cysts is		B
	A. Sodium chloride	B. Zinc sulfate	
	C. Sodium nitrate	D. Physiologic saline	
600)	Kidney function can be assessed by the following preanesthetic screening tests except		C
	A. BUN	B. Urinalysis	
	C. ALT	D. Creatinine	
601)	Using ketamine as an anesthetic agent diminishes the value of what measure in assessing anesthetic depth?		D
	A. Pinna reflex	B. Jaw muscle tone	
	C. Pedal reflex	D. Eye position	
602)	For a Dorsoventral (DV) view of the entire skull, you should center the primary beam		D
	A. At the medial canthi on the bridge of the nose	B. At the highest point of the zygomatic arch	
	C. Between the ears	D. Between lateral canthi on sagittal crest	
603)	Ivermectin is not effective against flukes and tapeworm infections because		D
	A. Fumerate reductase is not present in flukes and tapeworms	B. Mitochondrial phosphorylation is not present in flukes and tapeworms	
	C. Acetyl choline transmission is not present in flukes and tapeworms	D. GABA transmission is not present in flukes and tapeworms	
604)	Direct life cycle is also called		A
	A. Monoxenous	B. Complete	
	C. Heteroxenous	D. None	
605)	The signs of poisoning with organophosphorus anticholinesterase insecticides do not include, in Humans:		D
	A. Bronchoconstriction	B. Intestinal spasm	
	C. Mydriasis	D. Increased bronchial secretions	
606)	Members of Psychodidae family in Nematocera are commonly known as		A
	A. Biting's midges	B. Black flies	
	C. sand flies	D. Mosquitoes	
607)	Horse flies and ..... are very striking in their appearance. They are fairly large flies with aggressive biting habits.		D
	A. Tsetse flies	B. House flies	
	C. Buffalo flies	D. Deer flies	
608)	Type of anemia in CIN		D
	A. Microcytic normochromic	B. Normocytic normochromic	
	C. Macrocytic Normochromic	D. Normocytic hypochromic	
609)	Benign tumors arising from the salivary gland epithelium are called:		B
	A. Fibromas	B. Pleomorphic Adenomas	
	C. adenocarcinoma	D. Transitional cells	
610)	Severe babesiosis in dogs can result in which of the following:		D
	A. anemia	B. all of the above	
	C. hypoalbuminemia	D. none of above	
611)	The following substances increase the capillary permeability in acute inflammation except:		C



	A. Bradykinin	B. Angiotensin	
	C. Histamine	D. Complement proteins	
612)	The newly formed, highly vascularized, connective tissue with a component of acute inflammatory exudation is known as		A
	A. purulent exudate	B. Scar	
	C. granulation tissue	D. Granuloma	
613)	NDV strains employed as live vaccine to protect poultry include		C
	A. Mesogenic strains	B. Lentogenic strains	
	C. Velogenic strains	D. All above	
614)	What the usual look of bursa of Fabricius in birds affected with Marek's Disease		C
	A. Normal	B. Swollen	
	C. Atrophied	D. None of above	
615)	Vitamin A deficiency in poultry feeds may result in		C
	A. Enhance epithelial repair	B. Weak bones	
	C. visceral urate deposits	D. None above	
616)	In necrotic enteritis duration of the clinical course is		A
	A. very short (few hours)	B. more than a week	
	C. 3-5 Days	D. All above	
617)	Egg drops syndrome virus infection results decreased egg production and		D
	A. Lameness in the laying hens	B. Watery albumin of eggs	
	C. weak shelled eggs	D. Above all	
618)	Minimum acceptable level of aflatoxins B1 in poultry feed is		B
	A. 100 ppb	B. 20 ppb	
	C. 300 ppb	D. 50 ppb	
619)	The mechanism of transport of drug which work like active transport but the drug does not more against concentration gradient;		B
	A. Pinocytosis	B. Facilitated diffusion	
	C. Passive diffusion	D. Endocytosis	
620)	Most drugs and metabolites are excreted by;		A
	A. The kidneys	B. The lungs	
	C. The bile	D. The saliva	
621)	The rate of drug absorption is greatest in;		A
	A. The small intestine	B. The stomach	
	C. The large intestine	D. Plasma	
622)	Rectally palpable positive sign of pregnancy in cattle at 45 days of gestation is		D
	A. Disparity in uterine horn size	B. Presence of a big CL	
	C. Fluid fluctuation in uterine horns	D. Presence of Amniotic vesicle	
623)	What is the average duration of estrus period in the buffalo?		D
	A. 21 days	B. 17 days	
	C. 42 days	D. None of the above	
624)	Placentomes are formed by the fusion of:		A
	A. Maternal caruncles and fetal cotyledons	B. Both A and B	
	C. Maternal cotyledons and fetal caruncles	D. None of the above	
625)	Extracellular fluid is transported through all parts of the body. The conventional flow of this distribution is as follows		C
	A. Tissue → blood → blood vessels → blood capillaries	B. Tissue → blood → blood vessels → blood capillaries → cells	
	C. Blood → blood vessels → blood capillaries → tissue cells	D. None of above	
626)	The continual exchange of extracellular fluids occurs between ____ at cellular level.		A
	A. Plasma portion of blood and the interstitial fluid	B. Water portion of blood and interstitial of fluid	
	C. Blood and intercellular spaces	D. All	

627)	The homeostatic functions restore the normal physiology with the help of many attributing components of this system, named as		A
	A. Sensor, control center, effectors	B. Receptors, control center, organs	
	C. Biomolecules, brain, organs	D. Biomolecules, brain, systems, effector	
628)	Feedback is a process in which some portion of output signal of a system is fed back to input and reacts to deviation via		A
	A. Positive feedback signals	B. Negative feedback signals	
	C. Normal signals	D. Both (a,b)	
629)	Plasma and serum is differentiated from each other by absence of _____		B
	A. Carrier proteins, like albumin	B. Clotting proteins, like fibrinogen	
	C. Plasma proteins, like globulin	D. Specialized proteins, like enzymes	
630)	Anemia is a disease which deals with _____		D
	A. Reduction in RBCs count	B. Reduction in hemoglobin content	
	C. Reduction in packed cell volume	D. All	
631)	The energy generating organelle of the cell that often termed as "Power house of the cell" is		B
	A. Endoplasmic reticulum	B. Mitochondria	
	C. Golgi apparatus	D. Cytoskeleton	
632)	The processing, packaging, labeling and delivery of proteins and lipids are carried out by specialized organelle is known as,		A
	A. Golgi apparatus	B. Lysosome	
	C. Peroxisomes	D. Mitochondria	
633)	Immune system causes tissue damage as it fights off a perceived threat, also known as allergies		B
	A. Hypersensitivities	B. Autoimmune diseases	
	C. Immunodeficiency	D. Antibiotics	
634)	The _____ is known to be functional partner of bone		A
	A. Skeletal muscle	B. Tendon	
	C. Ligament	D. Myofibrils	
635)	Which one of the following sets of ions is necessary in chemical events in for muscle contraction?		C
	A. Na <sup>+</sup> and K <sup>+</sup> ions	B. Na <sup>+</sup> and Ca <sup>++</sup> ions	
	C. Ca <sup>++</sup> and Mg <sup>++</sup> ions	D. Na <sup>+</sup> and Mg <sup>++</sup> ions	
636)	Which of the following is contractile protein of muscle?		B
	A. Tubulin	B. Myosin	
	C. Actin	D. Troponin	
637)	At the distal end of the mouth, throat divides into two separate tubes: 1. Gullet, 2. Windpipe. What prevents food from entering into windpipe?		A
	A. The epiglottis	B. The glottis	
	C. The tongue	D. The throat	
638)	Glycogenolysis is		B
	A. Creation of glycogen	B. Destruction of glycogen	
	C. Destruction of glucose	D. Creation of glucose	
639)	The main function of the kidney is to:		B
	A. Eliminate O <sub>2</sub>	B. Regulate fluid balance	
	C. Metabolize vitamins	D. Eliminate CO <sub>2</sub>	
640)	Electrolytes are especially essential to which cells		C

	A. Nerve	B. Muscle	
	C. Both (a,b)	D. None of above	
641)	_____ percent (%) solution of NaCl is considered isotonic to mammalian RBCs.		C
	A. 0.8%	B. 0.85%	
	C. 0.90%	D. 0.95%	
642)	_____ works opposite to insulin while controlling blood glucose concentration.		D
	A. Insulin	B. Oxytoxin	
	C. Thyroxin	D. Glucagon	
643)	The life span of RBCs is of _____ days		C
	A. 80	B. 100	
	C. 120	D. 140	
644)	Positively charged ions are called _____		B
	A. Anions	B. Cations	
	C. Cell body	D. Nephrons	
645)	Ultra violet rays can _____		B
	A. Help to diagnose skin cancer	B. Penetrate and change the skin cells	
	C. Cause no harm to skin	D. Enhance the beauty of the skin	
646)	_____ tissue type has the greatest ability to regenerate.		D
	A. Muscle	B. Epithelial	
	C. Nervous	D. Connective	
647)	Which structure detects changes in temperature?		B
	A. Pons	B. Thermoreceptor	
	C. Medulla	D. Pituitary gland	
648)	_____ cranial nerve is responsible for eye movement.		A
	A. Oculomotor	B. Vagus	
	C. Trigeminal	D. Olfactory	
649)	Which hormone does the pancreatic alpha cell secrete?		A
	A. Glucagon	B. Insulin	
	C. Somatotropin	D. Somatostatin	
650)	The target organ of TRH is _____		C
	A. Adrenal gland	B. The pituitary gland	
	C. Thyroid gland	D. pancreas	
651)	The process by which cell can take in fluid and molecules too large to be carried across the plasma membrane by active transport is called		C
	A. Phagocytosis	B. Diffusion	
	C. Pinocytosis	D. Absorption	
652)	The majority of melanomas are caused by:		A
	A. Exposure to ultra violet light	B. Lack of Vitamin D	
	C. A poor diet	D. Excess fatty tissues	
653)	The main function of the kidney is to:		B
	A. Eliminate oxygen	B. Regulate fluid balance	
	C. Metabolize vitamins	D. Eliminate carbon	
654)	Histamine causes:		C
	A. The death of infectious microorganisms	B. Some of the functions of T-cell lymphocytes	
	C. Some of the signs and symptoms of inflammation	D. The bonding of T-cell lymphocytes to infectious microorganisms	
655)	Which of the following statements is true?		B

	A.	Squamous epithelial cells are cube shaped	B.	Stratified cuboidal epithelial will have multiple layers of cells	
	C.	Stratified epithelium consists of a single layer of cells	D.	Simple columnar epithelium consists of flat and scale like cells	
656)	Which of the following is completely reabsorbed in the proximal convoluted tubule of nephron.?				A
	A.	Sodium	B.	Water	
	C.	Glucose	D.	Urea	
657)	Cytokines are chemical messengers which:				A
	A.	Promote inflammation	B.	Kill infecting microorganisms	
	C.	Cause Pain	D.	Produce antibodies	
658)	Which of the following statements is true?				C
	A.	Endothelium is the most abundant type of tissue in the body	B.	The key function of simple epithelium is to provide strength	
	C.	Endothelium lines blood vessels and the heart	D.	All of the above are true	
659)	The movement of fluid between compartments is regulated by:				A
	A.	Osmotic and hydrostatic pressures	B.	Glomerular filtration rate	
	C.	Parathyroid hormone	D.	ATP	
660)	The correct term for containing sample of skin for histological examination is called a:				C
	A.	Surgical shave	B.	Injection	
	C.	Biopsy	D.	Aspiration	
661)	Which is the most abundant tissue in the human body?				D
	A.	Epithelial	B.	Nervous	
	C.	Connective	D.	Skeleton	
662)	Scar tissue formation is also known as....				A
	A.	Fibrosis	B.	Granulation	
	C.	Mitosis	D.	Necrosis	
663)	Gluconeogenesis is:				D
	A.	The creation of glycogen	B.	The destruction of glycogen	
	C.	The destruction of glucose	D.	The creation of glucose	
664)	Which of these is an example of a neurotransmitter?				D
	A.	Dopamine	B.	Norepinephrine	
	C.	Acetylcholine	D.	All of the above	
665)	What substance does aldosterone directly regulate the concentration of?				C
	A.	Potassium	B.	Phosphorous	
	C.	Sodium	D.	Calcium	
666)	What stimulates the release of ADH from the posterior pituitary gland?				B
	A.	Increased blood levels of glucose	B.	Increased blood levels of sodium	
	C.	Decrease blood levels of glucose	D.	Decrease blood levels of soduim	
667)	The correct term for the end of a bone is:				D
	A.	The terminal ileum	B.	The xiphoid	
	C.	The diaphysis	D.	The epiphysis	
668)	S.I. units are standardized:				D
	A.	Units of molecules	B.	Units of cells	
	C.	Units of substances	D.	Units of measurements	
669)	Thick filaments in skeletal muscle are composed of				B
	A.	Actin	B.	Myosin	
	C.	Troponin	D.	Tropomyosin	
670)	How do muscles attached to the bones move the body?				C
	A.	Automatically	B.	Push movement	
	C.	Pull movement	D.	Push and pull movement	
671)	Arteries that directly lead into capillaries are called:				A
	A.	Arterioles	B.	Pulmonary valve	

	C. Muscular arteries	D. Tricuspid valve	
672)	Which valve prevents the backwards flow of blood in to the left atrium?		C
	A. Aortic valve	B. Pulmonary valve	
	C. Mitral valve	D. Tricuspid valve	
673)	Which digestive tract hormone inhibits gastric gland secretion and gastric motility?		C
	A. Gastrin	B. Cholecystokinin	
	C. Secretin	D. Anti-diuretic hormone	
674)	Lack of Vitamin B <sub>12</sub> results i:		C
	A. Vascular spam	B. Vascular dilation	
	C. Anemia	D. Agglutination	
675)	The effect of adrenaline on the heart includes:		A
	A. Increased heart rate	B. Increased diastolic time	
	C. Increased systolic time	D. Increased relaxation period	
676)	Which part of the digestive tract has small adaptations called microvilli?		D
	A. The oesophagus	B. The large intestine	
	C. The stomach	D. The small intestine	
677)	What happens to dietary carbohydrates?		D
	A. They are broken down into amino acids by hydrolysis	B. They are broken down into glycerol and fatty acids by catabolism	
	C. They are broken down into simple sugars by the action of pepsin	D. They are broken down into monosaccharide by the action of amylase	
678	Cell physiology includes application of most of law's of which subjects.		C
	A. Biology	B. Chemistry	
	C. Physics and Chemistry	D. Physics	
679	Failure of a tissue or organ to develop is called.		B
	A. Hypoplasia	B. Aplasia	
	C. Neoplasia	D. Alopecia	
680	Sperms are produced at a temperature that is:		C
	A. Higher than body temperature	B. The same as body	
	C. Lower than body temperature	D. Immaterial	
681	The property of being able to react to a stimulus is called.		B
	A. Conductivity	B. Irritability	
	C. Contractility	D. Transmission	

682	Which mineral is an essential part of thyroxin				D
	A	Fe	B	Na	
	C	Mg	D	Iodine	
683	The second largest constituent of protoplasm is				B
	A	Water	B	Protein	
	C	Lipid	D	Inorganics	
684	Immunity depends on which constituent as antibodies				B
	A	Carbohydrates	B	Proteins	
	C	Lipids	D	Fats	
685	Lipids includes				D
	A	Triglycerides	B	Protein	
	C	Waxes	D	All of the above	
686	Which constituent in the cell has a high rate of utilization as energy?				
	A	Carbohydrates	B	Proteins	
	C	Fats	D	Amino acid	
687	Electrolytes are especially essential to which cells.				C
	A	Nerve	B	Muscle	
	C	Both	D	None of them	
688	What percent solution of NaCl is considered isotonic to mammalian RBCs.				B
	A	0.80%	B	0.85%	
	C	0.90%	D	0.95%	
689	Which trans-membrane movement involves carriers				B
	A	Facilitated diffusion	B	Both	
	C	Active transport	D	None of them	

690	The speed of entry of glucose is greatly increased by		B		
	A .	Oxytocin		B .	Insulin
	C .	Glucagon		D .	Thyroxin
691	Select a fat-soluble vitamin:		B		
	A .	Ascorbic acid		B .	Tocopherol
	C .	Thiamine		D .	Riboflavin
692	If a bathing fluid has higher osmotic pressure than the cell it is called:		A		
	A .	Hypertonic		B .	Hypotonic
	C .	Isotonic		D .	All
693	Crenation of Red cell occur, in		A		
	A .	Hypertonic		B .	Hypotonic
	C .	Isotonic		D .	All
694	The small spherical organelles attached to rough endoplasmic reticulum are called		C		
	A .	Vesicles		B .	Vacuoles
	C .	Ribosome		D .	Polysomes
695	Number of grams of solute per 1000 gm of solvent is called:		B		
	A .	Normal solution		B .	Molar solution
	C .	Molal solution		D .	Simple solution
696	Which ion is found in greater concentration outside the cell?		B		
	A .	K		B .	Na
	C .	Cl		D .	HCO <sub>3</sub>
697	Rough endoplasmic reticulum is involved in the synthesis of		B		
	A .	Glycogen		B .	Protein
	C .	Steroids		D .	Lipids

698	Enzymes involved in krebs cycle are localized in				A
	A	Ribosomes	B	Polysomes	
	C	Mitochondria	D	Golgi bodies	
699	Lysosomas are abundant in				B
	A	RBCs	B	WBCs	
	C	Platelet	D	All	
700	Following nucleotides are called pyrimidine				B
	A	Adenine	B	Cytosine	
	C	Guanine	D	All	



Subject (Cell Biology)		701-800 MCQ's		Answer Key	
701)	In eukaryotic cells, the mitotic apparatus is composed of			A	
	A.	two centrosomes and spindle microtubules	B.		Both
	C.	Tubulin Protein	D.		Three centrosomes and two spindle microtubules
702)	Nitrogenous bases of RNA are			C	
	A.	uracil and adenine	B.		uracil, adenine, guanine and cytosine
	C.	B thymine and uracil	D.		D thymine, adenine, guanine and cytosine
703)	Which of the following is true about Mitochondria?			D	
	A.	Mitochondria contains DNA.	B.		Mitochondria helps to convert energy from food molecules into usable energy and stored as adenosine triphosphate molecules.
	C.	It is rod-shaped	D.		All of these
704)	Nobel prize for RNA synthesis was awarded to			B	
	A.	A. Kornberg	B.		S. Ochoa
	C.	H. Khorana	D.		Nirenberg
705)	_____ are structures which provide adhesion and communication between cells.			B	
	A.	Gap junction	B.		Intercellular Junction
	C.	Trans-membrane protein	D.		Extra cellular matrix
706)	Which of the following is <u>not</u> found in the cell membrane?			D	
	A.	Cholesterol	B.		Phospholipids
	C.	Protein	D.		Nucleotide
707)	Protein synthesis occurs at the			D	
	A.	Mitochondria	B.		Lysosomes
	C.	Within the nucleus	D.		Ribosomes
708)	Oxygen enters a cell via?			A	
	A.	Diffusion	B.		Filtration

	C. Active transport	D. Osmosis	
709)	Many substances are removed from the cell to outside by		B
	A. Pinocytosis	B. Phagocytosis	
	C. Chemotaxis	D. Exocytosis	
710)	<b>This is not the function of plasma membrane</b>		D
	A. Energy transduction	B. Responding to external stimuli	
	C. Intercellular interactions	D. Assisting in chromosome segregation	
711)	The appearance of which of the following distinguishes eukaryotic cells from lower units of life?		B
	A. DNA	B. Protein	
	C. Nucleus	D. RNA	
712)	<b>The major interaction responsible for stabilizing plasma membrane</b>		A
	A. Hydrophobic interaction	B. Hydrophilic interaction	
	C. Covalent bond	D. Ionic Bond	
713)	A chromosome consists of the DNA and		C
	A. Gene	B. Protein	
	C. Lipid	D. Carbohydrates	
714)	The fluid matrix inside the cell is called _____.		B
	A. Neoplasm	B. Cytoplasm	
	C. Endoplasm	D. Golgi apparatus	
715)	<b>Ion carriers are located in</b>		A
	A. Plasma membrane	B. Cell membrane	
	C. Nucleus	D. Rough Endoplasmic reticulum	
716)	Cytosol is the part of the		B
	A. Receptor	B. Cytoplasm	
	C. Channel	D. Integral Protein	
717)	<b>In the plasma membrane, lipid molecules are arranged in</b>		D
	A. Series	B. Alternate	
	C. Scattered	D. Head parallel	
718)	Since the liver cells detoxify drugs, they most likely have an abundance of:		A
	A. Smooth endoplasmic reticulum	B. Nuclei	
	C. Golgi apparatus	D. Lysosome	
719)	Glycocalyx is associated with		A
	A. Cell wall	B. Nucleus	

	C. Plasma Membrane	D. Ribosome	
720)	Cristae are associated with?		A
	A. Mitochondria	B. Vacuole	
	C. Cytoplasm	D. Ribosomes	
721)	Calcium efflux from the ER associated with?		C
	A. Cell wall	B. Nucleus shrink	
	C. Beta cell death	D. Ribosomes	
722)	Sodium and potassium pumps are examples of		B
	A. Passive transport	B. Active transport	
	C. Plasmolysis	D. Osmosis	
723)	Cell theory is applicable to:		A
	A. Virus	B. Fungi	
	C. Micro-organism	D. Algae	
724)	Which among the following is known as mitoplast?		A
	A. Mitochondria without outer membrane	B. Mitochondria without membranes	
	C. Mitochondria without inner membrane	D. Another name for mitochondria	
725)	Cell drinking is:		B
	A. Exocytosis	B. Pinocytosis	
	C. Endocytosis	D. Phagocytosis	
726)	Centrioles take part in the formation of		C
	A. Cell plate	B. Nucleus	
	C. Spindle	D. To start cell division	
727)	The term cell was given by		A
	A. Robert Hooke	B. Schwann	
	C. Tatum	D. De Bary	
728)	The membrane around the vacuole is known as		A
	A. Tonoplast	B. Cytoplasm	
	C. Elaiplast	D. Amyloplast	
729)	Microfilaments are composed of a protein called		C
	A. Tubulin	B. Myosin	
	C. Actin	D. Chitin	
730)	Glycolipids in the plasma membrane are located at		B
	A. Inner leaflet of the plasma membrane	B. The outer leaflet of the plasma membrane	
	C. Evenly distributed in the inner and outer leaflets	D. It varies according to cell types	
731)	Lysosomes are known as "suicidal bags" because		B
	A. Parasitic activity	B. Hydrolytic activity	
	C. Presence of food vacuole	D. Catalytic activity	
732)	The oxygen and carbon dioxide cross the plasma membrane by the process of		C
	A. Active diffusion	B. Facilitated diffusion	
	C. Simple diffusion	D. Random diffusion	

733)	A cell without a cell wall is termed as		C
	A. Tonoplast	B. Symplast	
	C. Protoplast	D. Apoplast	
734)	The function of centrosome is		A
	A. Formation of spindle fibers	B. Secretion	
	C. Osmoregulation	D. Protein synthesis	
735)	Which cell organelle is involved in apoptosis?		D
	A. Lysosome	B. Golgi	
	C. Endoplasmic Reticulum	D. Mitochondria	
736)	Distribution of intrinsic proteins in the plasma membrane is		B
	A. Random	B. Asymmetrical	
	C. Symmetrical	D. None	
737)	<b>Which of the following cell organelles is absent in animal cells and present in a plant cell?</b>		B
	A. Cell wall	B. Vacuoles	
	C. Cytoplasm	D. Mitochondria	
738)	<b>Which of the following cell organelles does not contain DNA?</b>		C
	A. Nucleus	B. Chloroplast	
	C. Lysosomes	D. Mitochondria	
739)	<b>Which of the following cell organelles is called the powerhouse of the cell?</b>		D
	A. Nucleus	B. Chloroplast	
	C. Lysosomes	D. Mitochondria	
740)	<b>Which of the following cell organelles regulates the entry and exit of molecules to and from the cell?</b>		B
	A. Lysosomes	B. Cell membrane	
	C. Golgi bodies	D. Mitochondria	
741)	<b>_____ is the study of the cell, its types, structure, functions and its organelles.</b>		C
	A. Biology	B. Microbiology	
	C. Cell Biology	D. Biotechnology	
742)	<b>_____ is involved in the synthesis of phospholipids.</b>		B
	A. Mitochondria	B. Endoplasmic reticulum	
	C. Cytoplasm	D. Smooth endoplasmic reticulum	
743)	<b>Which of the following is a single membrane-bound organelle?</b>		A
	A. Vacuole	B. Endoplasmic reticulum	
	C. Golgi apparatus	D. All of the above	
744)	<b>Which of the following statements is true about the Golgi bodies?</b>		D
	A. It is a sac-like organelle	B. It is located near the nucleus	
	C. It helps in transporting the particles throughout the cell	D. All of the above	
745)	Cell wall is mainly composed of		B
	A. Lipid	B. Cellulose	
	C. Starch	D. Protein	
746)	Which of the following cell organelles is absent in animal cells but present in a plant cell?		A

	A. Cell wall	B. Vacuoles	
	C. Cytoplasm	D. Mitochondria	
747)	The elements that present in Protoplasm		C
	A. Carbon, Hydrogen	B. Carbon, Nitrogen, and Oxygen	
	C. Carbon, Hydrogen, Nitrogen, and Oxygen	D. Helium, Carbon, Oxygen	
748)	The study of the structure and composition of cells is called		A
	A. Cytology	B. Ecology	
	C. Anthology	D. Phenology	
749)	Which of the following cell organelles contains RNA?		D
	A. Mitochondria	B. Plastids	
	C. Lysosomes	D. Ribosomes	
750)	What is the site of ribosome in a living cell?		D
	A. Endoplasmic reticulum	B. Golgi bodies	
	C. Plasma membrane	D. Nucleolus	
751)	Which of the following cell organelles is absent in plant cells but present in animal cells?		B
	A. Nucleus	B. Centrosome	
	C. Golgi bodies	D. Plastids	
752)	Which of the following statements is true about the Golgi bodies?		D
	A. It is a sac-like organelle	B. It is located near the nucleus.	
	C. It helps in carrying the particles throughout the cell	D. All of the above	
753)	The total number of chromosomes in a normal human being is		B
	A. 23	B. 46	
	C. 53	D. 26	
754)	Pigments containing bodies that are bounded by the membrane are called		D
	A. Chlorophyll	B. Hemoglobin	
	C. Chloroplast	D. Plastids	
755)	A chromosome consists of DNA and		B
	A. Gene	B. Protein	
	C. Lipids	D. Carbohydrates	
756)	The Golgi complex is responsible for transporting, modifying, and packaging		B
	A. DNA	B. Protein and lipids	
	C. RNA	D. None of them	
757)	The number of specialized cells in the human body is approximately		C
	A. 300 types	B. 210 types	
	C. 200 types	D. 250 types	
758)	The rRNA is Synthesized by _____		B
	A. Golgi body	B. Nucleolus	

	C. Nucleus	D. Cytoplasm	
759)	Sodium and Potassium Pumps are Examples of _____		D
	A. Plasmolysis	B. Osmosis	
	C. Passive transport	D. Active transport	
760)	Identify the Longest Cell in the Human Body from the List Given Below		A
	A. Nerve cells	B. Bone cells	
	C. Gland cells	D. Muscle cells	
761)	Which of the Below Option is/are Examples of an Organ that Contain a Smooth Muscle?		D
	A. Uterus only	B. Bronchi only	
	C. Iris of eye	D. All of the above	
762)	On the Below-Given List, which One Includes the Blood Tissue?		A
	A. Muscle tissue	B. Connective tissue	
	C. Nervous tissue	D. Epithelial tissue	
763)	Identify the Structure of the Plant Cell, which is Non-Living from the given list.		D
	A. Nucleus	B. Cytoplasm	
	C. Mitochondrion	D. Cell wall	
764)	According to cell theory		C
	A. All cells have nuclei	B. All cells have nuclei	
	C. Cells, are fundamental units of all the living organisms	D. Cells arise from pre-existing cells	
765)	The nucleus of a prokaryotic cell is represented by		B
	A. A well-defined nuclear membrane	B. Double stranded circular DNA	
	C. Nucleolus only	D. Single stranded DNA	
766)	Physical basis of life is		C
	A. Nucleus	B. Protoplasm	
	C. Cell	D. Nutrition	
767)	The largest cell organelle is		D
	A. Nucleus	B. Endoplasmic reticulum	
	C. Mitochondria	D. Chloroplast	
768)	Which of the following requires energy?		B
	A. Diffusion	B. Active transport	
	C. Osmosis	D. Facilitated diffusion	
769)	Which of the following is not found in the cell membrane?		D
	A. Cholesterol	B. Protein	
	C. Phospholipids	D. Nucleic acids	
770)	Glycolipids in the plasma membrane are located at		B
	A. Inner leaflet of the plasma membrane	B. The outer leaflet of the plasma membrane	
	C. Evenly distributed in the inner and outer leaflets	D. It varies according to cell types	
771)	Microfilaments are composed of a protein called		C
	A. Tubulin	B. Myosin	
	C. Actin	D. Chitin	
772)	The properties of integral membrane proteins can be studied by		C

	A. Atomic force microscopy	B. Cryo-sectioning and electron microscopy	
	C. Freeze-fracture technique and electron microscopy	D. All of the above	
773)	The fluidity of the plasma membrane increases with		A
	A. Increase in unsaturated fatty acids in the membrane	B. Increase in saturated fatty acids in the membrane	
	C. Increase in glycolipid content in the membrane	D. Increase in phospholipid content in the membrane	
774)	The resting potential membrane is determined by		A
	A. Potassium-ion gradient	B. Bicarbonate-ion gradient	
	C. Sodium-ion gradient	D. None	
775)	The function of the centrosome is		A
	A. Formation of spindle fibers	B. Osmoregulation	
	C. Secretion	D. Protein synthesis	
776)	Which cell organelle is involved in apoptosis?		D
	A. Lysosome	B. Golgi	
	C. Endoplasmic reticulum	D. Mitochondria	
777)	_____ is a specialized subunit, usually within a cell, that has a specific function.		B
	A. Cell	B. Organelle	
	C. Tissue	D. Organ system	
778)	What is the strongest cell in human body?		A
	A. Stem cell	B. Cardiac cell	
	C. Somatic cell	D. Muscle cell	
779)	The smallest known cells are a group of tiny bacteria called _____		A
	A. Mycoplasmas	B. Mycobacterium	
	C. Cephalosporin	D. Virus	
780)	The process where a single cell divides into two identical daughter cells (cell division) called?		A
	A. Mitosis	B. Telophase	
	C. Meiosis	D. Interphase	
781)	DNA replication occurs in		A
	A. S Phase	B. G <sub>2</sub> Phase	
	C. G Phase	D. M Phase	
782)	Eukaryotic cells normally range between _____		A
	A. 10– 100µm	B. 1– 80µm	
	C. 10– 60µm	D. 1– 70µm	
783)	_____ is a jellylike substance found floating inside the plasma membrane.		C
	A. Cell sap	B. Karyoplasm	
	C. Cytoplasm	D. Mitochondria	
784)	Post translational modification takes place in		D
	A. Nucleus	B. Endoplasmic reticulum	
	C. Mitochondria	D. Endoplasmic reticulum and Golgi	
785)	Cell physiology includes application of most of law's of which subjects		C
	A. Biology	B. Chemistry	

	C. Physics and Chemistry	D. Physics	
786)	Protoplasm is made up of except:		D
	A. Water	B. Amino acid	
	C. Polysaccharide	D. Vacuole	
787)	What constitute has a high rate of utilization as energy?		B
	A. Carbohydrates	B. Fats	
	C. Proteins	D. Water	
788)	Electrolytes are especially essential to which cells.		B
	A. Nerve	B. Both	
	C. Muscle	D. None of them	
789)	Which trans-membrane movement involves carriers?		C
	A. Facilitated diffusion	B. Active transport	
	C. Both	D. None of them	
790)	A definite shape given to the cell is by		D
	A. Ribosome	B. Nucleus	
	C. Cell wall	D. Cell membrane	
791)	Cellulose, pectin and hemicelluloses together make up to form a		A
	A. Primary wall	B. Tertiary wall	
	C. Middle wall	D. Secondary wall	
792)	Human mitochondrial DNA is:		D
	A. Circular	B. Single standard	
	C. Self-replicating	D. Double standard	
793)	What is the main function of nucleolus		A
	A. Ribosomal RNA synthesis	B. DNA Replication	
	C. Cell division	D. Chromosome assembly	
794)	Microfilaments are mainly composed of a protein called		A
	A. Actin	B. Myosin	
	C. Tubulin	D. Chitin	
795)	Which of the following is associated with the structure of Golgi complex?		C
	A. Cristea	B. Annuli	
	C. Cisternae	D. Qutasome	
796)	The subunits of prokaryotic ribosome are		D
	A. 60S+40S	B. 70S+40S	
	C. 60S+30S	D. 50S+30S	
797)	Smooth endoplasmic reticulum is the site of		D
	A. Protein synthesis	B. Carbohydrate's synthesis	
	C. Amino acid synthesis	D. Lipid synthesis	
798)	In higher plants, the shape of the chloroplast is		A
	A. Discoid	B. Gridle shaped	
	C. Cup shaped	D. Ribbon shaped	
799)	_____move through these sites (from A to P to E) as they deliver amino acids during translation		A
	A. tRNAs	B. rRNA	



	C. mRNAs	D. Proteins	
800)	Most plasma membranes consist of approximately _____ percent protein and lipids.		A
	A. 50% and 50%	B. 50% and 30%	
	C. 30% and 50%	D. 40% and 50%	

<b>Subject: Biostatistics and Computer Applications (801-900)</b>				<b>Answer Key</b>
801)	Which of the following values is used as a summary measure for a sample, such as a sample mean?			C
	A. Population parameter	B. Sample parameter		
	C. Sample Statistic	D. Sample mean		
802)	Which of the following is a branch of statistics?			C
	A. Descriptive	B. Inferential		
	C. Both	D. None		
803)	The control charts and procedures of descriptive statistics which are used to enhance a procedure can be classified into which of these categories?			B
	A. Behavioral tools	B. Statistical Tools		
	C. Serial tool	D. Industry Statistics		
804)	Which of the following can also be represented as sample statistics?			D
	A. Lowercase Greek letters	B. Associated Roman alphabets		
	C. Uppercase Greek letters	D. Roman letters		
805)	To which of the following options do individual respondents, focus groups, and panels of respondents belong?			A
	A. Primary data source	B. Secondary data source		
	C. Itemized data source	D. Pointed data source		
806)	What are the variables whose calculation is done according to the weight, height, and length known as?			D
	A. Flow chart variables	B. Discrete variables		
	C. Measuring variables	D. Continuous variables		
807)	Which method used to examine inflation rate anticipation, unemployment rate, and capacity utilization to produce products?			C
	A. Data exporting technique	B. Data importing technique		
	C. Forecasting technique	D. Data supplying technique		
808)	Specialized processes such as graphical and numerical methods are utilized in which of the following?			A
	A. Descriptive statistics	B. Business statistics		
	C. Education statistics	D. Social statistics		
809)	What is the scale applied in statistics, which imparts a difference of magnitude and proportions, is considered as?			D
	A. Exponential scale	B. Satisfactory scale		
	C. Goodness scale	D. Ratio scale		
810)	The work statistic in German means			B
	A. Calculation	B. Government		
	C. Math's	D. Classification		
811)	The application of statistical methods in biology is called			C
	A. Statistics in biology	B. Statistics in vivo		
	C. Biostatistics	D. None of these		
812)	Biostatistics is also called as			A
	A. Biometry	B. Statistics in biology		
	C. Bio numerology	D. All of these		
813)	Who is regarded as the father of biostatistics			C
	A. Fischer	B. Karl Pearson		
	C. Francis Galton	D. Francis Bacon		
814)	The term 'biometry' was coined by			D
	A. Fischer	B. Karl Pearson		
	C. Francis Galton	D. Walter Weldon		
815)	The branch of biostatistics that deals with methods of collection, organization and presentation of data is called:			B
	A. Inferential biostatistics	B. Descriptive biostatistics		
	C. Both	D. None		
816)	The branch of biostatistics that deals with testing of hypothesis, making predictions using data collected is called:			A
	A. Inferential biostatistics	B. Descriptive biostatistics		

	C. Both	D. None	
817)	In biostatistics, group of individuals taken for study is called as:		B
	A. Block	B. Population	
	C. Group	D. flock	
818)	The characteristic or quantity that may vary from one individual to another is called:		B
	A. Static group	B. Variable	
	C. Dynamic group	D. Dynamism	
819)	Variables whose values can be expressed numerically are called:		A
	A. Quantitative variables	B. Qualitative variables	
	C. Absolute variables	D. Continuous variables	
820)	Color of the animal or human is a:		B
	A. Quantitative variables	B. Qualitative variables	
	C. Absolute variables	D. Continuous variables	
821)	Variables whose values cannot be expressed numerically are called:		B
	A. Quantitative variables	B. Qualitative variables	
	C. Absolute variables	D. Continuous variables	
822)	Quantitative variables that have only fixed or finite values are called:		B
	A. Quantitative variables	B. Discrete variables	
	C. Absolute variables	D. Continuous variables	
823)	Height of students in a class is a:		D
	A. Quantitative variables	B. Qualitative variables	
	C. Absolute variables	D. Continuous variables	
824)	Quantitative variables that can have any numerical values are called:		D
	A. Quantitative variables	B. Qualitative variables	
	C. Absolute variables	D. Continuous variables	
825)	Number of fruits in a tree is a		B
	A. Quantitative variables	B. Discrete variables	
	C. Absolute variables	D. Continuous variables	
826)	Standard error is due to:		C
	A. Normal distribution of means	B. Observer variation	
	C. Sampling error	D. Variation of the readings	
827)	In order to find out whether there is significant association or not between two variables, we calculate:		A
	A. Co-efficient of correlation	B. Co-efficient of regression	
	C. Standard deviation	D. Standard error	
828)	If we know the value of one variable and wish to know that of another variable, we calculate:		D
	A. Geometric mean	B. Co-efficient of correlation	
	C. Standard error of mean	D. Co-efficient of regression	
829)	Normal distribution curve depends upon:		D
	A. Mean and Median	B. Median and Standard deviation	
	C. Mean and Sample	D. Mean and Standard deviation	
830)	Normal curve in statistics is:		C
	A. Linear	B. Asymmetrical	
	C. Symmetrical	D. Curvilinear	
831)	Central value of a series is known as:		D
	A. Mean	B. Median	
	C. Mode	D. Average	
832)	All of the followings are measures of Central tendency of given observations except:		B
	A. Arithmetic Mean	B. Median	
	C. Mode	D. Average	
833)	Root means square deviation denotes:		A
	A. Standard deviation	B. Standard error	
	C. Mean standard deviation	D. All of these	
834)	The value of probability falls between:		C
	A. 1 to 2	B. 1 to 10	

	C. 0-1	D. 0-10	
835)	Randomization is:		C
	A. Mixing controls with cases	B. Mixing different types of controls	
	C. Statistical procedure of allocating participants into study and control groups	D. Selecting characteristics of case group	
836)	Use of double blind trial is:		B
	A. To avoid false negative results	B. Avoid subject bias	
	C. Increase true negatives	D. Avoid observer bias	
837)	The numerator is not a component of denominator		C
	A. Rate	B. Proportion	
	C. Ratio	D. None of these	
838)	Which of the following data is not measurable?		A
	A. Nominal	B. Ordinal	
	C. Discrete	D. Continuous	
839)	A number of letter that appears little above the normal text is called?		A
	A. Superscript	B. Super text	
	C. Subscript	D. Top text	
840)	Name the Desktop database application that is part of MS Office suit.		A
	A. MS Access	B. MS PowerPoint	
	C. MS Excel	D. None of the above	
841)	Which one is the spreadsheet application that comes with MS Office software group?		
	A. MS Word	B. MS PowerPoint	
	C. MS Excel	D. MS Access	
842)	To go to a specific location in a document we use :		B
	A. Macro	B. Bookmark	
	C. HTML	D. None of the above	
843)	Starting with Microsoft Office 2003, Photo Editor was renamed to		
	A. Photo editor	B. Picture editor	
	C. Photo manager	D. Picture manager	
844)	A feature of MS Office that saves the document automatically after certain interval is called ____?		B
	A. Save	B. Auto save	
	C. Save as	D. None of the above	
845)	What was the HTML editor that was part of Microsoft Office until 2003?		C
	A. Web page	B. Explorer	
	C. Front page	D. None of the above	
846)	Which feature is used to make selected sentence to All Capital Letters or All Small Letters ?		A
	A. Change case	B. Change sentence	
	C. Change letter	D. Change word	
847)	In Ms word, a master document contains _____ of subdocument ?		B
	A. Placeholder	B. Links	
	C. Files	D. Same data as	
848)	In Microsoft Word, _____ can be used to decide on the spacing between lines of a paragraph.		D
	A. Alignment	B. Indentation	
	C. Effects	D. Line spacing	
849)	Which option use to open recent file?		B
	A. Ctrl+R	B. Ctrl+O	
	C. Ctrl+F	D. Ctrl+N	
850)	All caps to selected text in MS Word is applied with?		B
	A. Alt+shift+A	B. Ctrl+shift+A	
	C. shift+A	D. Ctrl+A	
851)	Which feature starts a new line whenever a word or sentence reached a border		B
	A. Text Line	B. Text Wrapping	
	C. New Line	D. Text Align	

852)	Text-styling feature of MS word is?	A. Word color	B. Word font	C
		C. Word art	D. Word fill	
853)	What is the keyboard shortcut key for Save As?	A. Ctrl + F12	B. Alt+ F12	C
		C. F12	D. Shift + F12	
854)	Which items are placed at the end of a document	A. Footer	B. Header	D
		C. Foot note	D. End note	
855)	You can edit existing Excel data by pressing the: _____ key?	A. F1 Key	B. F3 Key	C
		C. F2 Key	D. F4 Key	
856)	The Greater Than sign is an example of _____ operation ?	A. Arithmetic	B. Conditional	C
		C. Logical	D. Greater	
857)	Which function displays row data into column or column data into row?	A. Hyperlink	B. Transpose	B
		C. Index	D. Rows	
858)	Move to Next Sheet in Ms Excel:	A. Ctrl + Page Down	B. Page Down	A
		C. Shift + Page Down	D. None of the above	
859)	With which of the following all formulas in excel starts ?	A. /	B. \$	D
		C. *	D. =	
860)	In MS Excel to delete duplicate values which menu is used?	A. Data	B. Layout	A
		C. Tools	D. Formatting	
861)	How many rows and columns are in one Microsoft Excel sheet?	A. 65534, 16384	B. 1048576, 10423	C
		C. 1048576, 16384	D. 1000321, 136384	
862)	Ordinal level data are characterized by:	A. Equal intervals between each adjacent score	B. Data that can be meaningfully arranged by order of magnitude	B
		C. A fixed zero	D. None of the above	
863)	For what is the 'variable view' in IBM SPSS's data editor used?	A. Entering data	B. Viewing output from data analysis	D
		C. Writing syntax	D. Defining characteristics of variables	
864)	Which of the following best describes the variable 'Gender'?	A. A between-group variable	B. A grouping variable	D
		C. A coding-group variable	D. All of the above	
865)	Which of the numbers below might IBM SPSS report as 10.574 E-05?	A. 0.00010574	B. 1057400.0	A
		C. 10.569	D. 0000.10574	
866)	Which of the numbers below might IBM SPSS report as 8.96 E+03?	A. 89.60	B. 0.008960	C
		C. 8960.0	D. 8.960	
867)	What is advantage of using SPSS over calculating statistics by hand?	A. This is how most quantitative data analysis is done in real research nowadays	B. It reduces the chances of making errors in your calculations	C
		C. It equips you with a useful transferable skill	D. All of the above	
868)	In SPSS what is the data viewer?	A. A table summarizing the frequencies of data for one variable	B. A dialog box that allows you to choose a statistical analysis	C
		C. A spreadsheet into which data can be entered	D. A screen in which variables can be defined and labelled	

869)	How is variable name different from a variable label?		A
	A. It is shorter and less detailed	B. It is abstract and unspecific	
	C. It is longer and more detailed	D. It refers to codes rather than variable	
870)	What does operation "Recode into different variable" do to the data?		B
	A. Replaces missing data with some random scores	B. Redistributes a range of values into a new set of categories and creates a new variable	
	C. Reverse the position of the independent and dependent variables on a graph	D. Represents the data in the form of a pie chart	
871)	How would you use the drop-down menus in SPSS to generate a frequency table?		C
	A. Open the output viewer and click Save As; Pie Chart	B. Click on: Graphs; frequencies; Pearson	
	C. Click on: Analyze; descriptive statistics; frequencies	D. Open the variable view viewer and recode the value table	
872)	When cross-tabulating two variables, it is conventional to:		C
	A. Represent the independent variable in rows and dependent variables in columns	B. Assign both the dependent and independent variables in columns	
	C. Represents the dependent variable in row and independent in column	D. Assign both the dependent and independent variables in rows	
873)	In which sub-dialog box can the Chi square test to be found?		A
	A. Crosstabs: Statistics	B. Gender; Female	
	C. Bivariate: Pearson	D. Frequencies; Percentage	
874)	Which of the following statements about nominal data is true?		C
	A. Nominal data have magnitude	B. Nominal is a synonym for 'continuous'	
	C. Nominal data are categorical	D. All nominal variables are dichotomous	
875)	SPSS uses the term 'Scale' to refer to		B
	A. Categorical data	B. Both interval and ratio level data	
	C. Both nominal and ordinal level data	D. All of these choices	
876)	'SPSS' stands for		A
	A. Statistical Package for the Social Sciences	B. Social Package for the Statistical Sciences	
	C. Scientific Package for the Social Sciences	D. Social Package for the Social Sequentials	
877)	Minitab is a statistics package developed at the		C
	A. George Washington University	B. Harvard University	
	C. Pennsylvania State University	D. University of Chicago	
878)	Statistical analysis computer applications have the advantage of being _____ and generally faster than computing statistics and drawing graphs by hand		A
	A. Accurate, Reliable,	B. Indefinite, Trustworthy	
	C. Reliable, vague	D. Accurate, Uncertain	
879)	Statistical software are		A
	A. SPSS, Minitab, Win-pepi	B. SPSS, Minitab, Spreadsheet	
	C. SPSS, tabulation	D. SPSS, Pi-chart, Win-pepi	
880)	The range of normal distribution is		D
	A. 0 to n	B. -1 to +1	
	C. 0 to $\infty$	D. $-\infty$ to $+\infty$	
881)	Which of the following is true about normal curve		D
	A. Symmetrical	B. Bell shaped	
	C. Unimodal	D. All of the above	
882)	A type II error occurs when the researcher:		A
	A. Fail to reject the null hypothesis when it is false	B. Reject the null hypothesis when it is false	
	C. Fail to reject the null hypothesis when it is true	D. Reject the null hypothesis when it is true	
883)	A quantitative statement about a population is called:		D
	A. Research hypothesis	B. Composite hypothesis	
	C. Simple hypothesis	D. Statistical hypothesis	
884)	The probability of rejecting the null hypothesis is when it is true is called		C
	A. Level of confidence	B. Power for the test	
	C. Level of significance	D. Level of rejection	
885)	R language is dialect of the following language?		A

	A. S	B. MATLAB	
	C. C	D. SAS	
886)	R language has superficial similarity with		C
	A. C	B. Python	
	C. MATLAB	D. SAS	
887)	What is the mode of “a” in the following R code A<- C(1.”a”, FALSE)		B
	A. Numeric	B. Integer	
	C. Character	D. Logical	
888)	How many atomic vector types does R have?		C
	A. 5	B. 8	
	C. 6	D. 10	
889)	What is the function of set row names for a data frame?		A
	A. row.names()	B. Col.names()	
	C. Colnames()	D. Column name cannot be set for a data frmae	
890)	R is an environment that helps in data		A
	A. Manipulation, statistical computing, graphics display, and data analysis	B. Manipulation, statistical computing, and data analysis	
	C. Manipulation, graphics display, and data analysis	D. Statistical computing and data analysis	
891)	The latest update to the R language, is now available for download on Windows, Mac and Linux		B
	A. R 3.6. 2,	B. R 4.0.5	
	C. R 2. 8.7	D. R 3.8.1	
892)	R was created by-----at the University of Auckland, New Zealand		A
	A. Ross Ihaka and Robert Gentleman	B. Ross Ihaka and Robert Gentleman	
	C. Shake and Throw	D. Ross Ihaka and Robert Gentleman	
893)	All of the following increase the width of a confidence interval except		C
	A. Increased confidence level	B. Increased Variability	
	C. Increased sample size	D. Decreased Sample Size	
894)	The statement that “ $P(A B) = P(B A)$ whenever $A$ and $B$ are independent events” is: Please select the best answer of those provided below		D
	A. Always True	B. Not Enough Information; we would need to know if $A$ and $B$ are disjoint events	
	C. Never True	D. Not Enough Information; we would need to know if the events are equally likely	
895)	The p-value in hypothesis testing represents which of the following: Please select the best answer of those provided below		D
	A. The probability of failing to reject the null hypothesis, given the observed results	B. The probability that the null hypothesis is true, given the observed results	
	C. The probability that the observed results are statistically significant, given that the null hypothesis is true	D. The probability of observing results as extreme or more extreme than currently observed, given that the null hypothesis is true	
896)	Green sea turtles have normally distributed weights, measured in kilograms, with a mean of 134.5 and a variance of 49.0. A particular green sea turtle’s weight has a z-score of -2.4. What is the weight of this green sea turtle? Round to the nearest whole number.		C
	A. 17 kg	B. 118kg	
	C. 151 kg	D. 252kg	
897)	What percentage of measurements in a dataset fall above the median?		D
	A. 49%	B. 51%	
	C. 50%	D. Cannot be counted	
898)	A quiz consists of 9 True/False questions. Assume that the questions are independent. In addition, assume that (T) and (F) are equally likely outcomes when guessing on any one of the questions. What is the probability of guessing on each of the 9 quiz questions and getting more than one of the True/False questions wrong? Round to 3 decimal places.		D
	A. 0.998	B. 0.018	
	C. 0.020	D. 0.980	

899)	The proportion of variation in 5k race times that can be explained by the variation in the age of competitive male runners was approximately 0.663. What is the value of the sample linear correlation coefficient? Round to 3 decimal places.		C	
A.	0.663	B.		-0.814
C.	0.814	D.		0.44
900)	Using all of the results provided, is it reasonable to predict the 5k race time (minutes) of a competitive male runner 73 years of age?		D	
A.	Yes; linear correlation between age and 5k race times is statistically significant	B.		Yes; both the sample linear regression equation and an age in years is provided
C.	No; linear correlation between age and 5k race times is not statistically significant	D.		No; the age provided is beyond the scope of our available sample data



**Subject: Microbiology MCQS 901-1000**

		<b>Answer Key</b>
901)	Which was the first Veterinary School	A
	A. Lyon, 1761	
	B. School of veterinary Medicine, 1761	
	C. Royal Veterinary School, 1761	
	D. None of these	
902)	Quarantine was first introduced by	A
	A. Lancisi, physician to Pope Clement XI from Rinderpest	
	B. lazaretto	
	C. Santa Maria di Nazareth	
	D. None of these	
903)	First animal virus ----- and was identified by ----- & -----	A
	A. FMD, Loeffler and Frosch	
	B. FMD, Lancisi and Frech	
	C. Rinderpest, Loeffler and Frosch	
	D. Rinderpest, Lancisi and Frech	
904)	Disease which does not produce any overt clinical sign	A
	A. Subclinical infection	
	B. Chronic Infection	
	C. Clinical infection	
	D. Latent Infection	
905)	Study of outbreaks in avian population is known as-----	A
	A. Epornitics	
	B. Epornology	
	C. Avion-ology	
	D. None of these	
906)	----- Epidemiology involves observing and recording disease and possible causal factors	A
	A. Descriptive	
	B. Transitional	
	C. Observational	
	D. None of these	
907)	----- is the study of cause, distribution and control of disease in related individual and of inherited defects	A
	A. Genetic epidemiology	
	B. Surveillance	
	C. Genomics	
	D. Incidence	
908)	----- is an examination of aggregation of units	A
	A. Survey	
	B. Endemic	
	C. Incidences	
	D. Cohort study	
909)	Survey records events occurring at a particular point of time	A
	A. Cross sectional survey	
	B. Investigational study	
	C. Retrospective	
	D. Cohort study	
910)	Unit of an epidemiologist	A
	A. Population	
	B. Agent	
	C. Environment	
	D. All of these	
911)	----- is the identification of undiagnosed cases of disease using rapid tests	A
	A. Screening	
	B. Incidence	
	C. Epidemics	
	D. None of these	
912)	-----is the making of routine observation on health, production and environmental factors and recording and dissemination of these observations	A
	A. Monitoring	
	B. Survey	
	C. Screening	
	D. Incidence	
913)	----- investigate relationship between disease and hypothetic causal factors in specified population	A
	A. Cross sectional study	
	B. Investigational study	
	C. Retrospective	
	D. Cohort study	
914)	----- is comparison of exposed group with non-exposed group to the factors with respect to development of disease	A
	A. Cohort study	
	B. Retrospective study	
	C. Screening	
	D. Incidence	
915)	-----is any observable event that can vary	A
	A. Variable	
	B. Pathogen	
	C. Incidence	
	D. None of these	
916)	Survey records events occurring for a long period of time	A
	A. Longitudinal study	
	B. Investigational study	
	C. Retrospective	
	D. Cohort study	
917)	----- Factors are associated with the definite onset of disease	A

	A. Precipitating factors	B. Independent factors	
	C. Variable	D. None of these	
918)	Constant occurrence of disease in a population or usual frequency of occurrence of disease is known as-----		A
	A. Endemic	B. Pandemic	
	C. Epidemic	D. None of these	
919)	Sudden unpredictable number of cases in a population		C
	A. Endemic	B. Pandemic	
	C. Epidemic	D. None of these	
920)	Widespread epidemic		B
	A. Endemic	B. Pandemic	
	C. Epidemic	D. None of these	
921)	Irregularly and haphazardly occurring diseases are known as -----		D
	A. Endemic	B. Pandemic	
	C. Epidemic	D. Sporadic	
922)	Amount of disease in a population is given by-----		A
	A. Morbidity	B. Diagnosis	
	C. Mortality	D. Fatality	
923)	Amount of death in a population is given by-----		C
	A. Morbidity	B. Diagnosis	
	C. Mortality	D. Fatality	
924)	Time of occurrence of a disease constitute-----distribution		A
	A. Temporal	B. Spatial	
	C. Prevalence	D. Incidences	
925)	Place of occurrence of disease constitute -----distribution		B
	A. Temporal	B. Spatial	
	C. Prevalence	D. Incidences	
926)	-----is the number of instances of disease or related attribute in a known population at designated time, without distinction of new and old cases		C
	A. Temporal	B. Spatial	
	C. Prevalence	D. Incidences	
927)	-----is the number of new cases occurring in a known population over a specified period of time		D
	A. Temporal	B. Spatial	
	C. Prevalence	D. Incidences	
928)	-----is the proportion of cases of a contagious disease that develop as a result of contact with primary cases		A
	A. Secondary attack rate	B. Incidence	
	C. Primary attack rate	D. None of these	
929)	$P \propto I X$ -----		A
	A. D (duration)	B. Intervale	
	C. Distance	D. None of these	
930)	----- is more intensive form of data recording		A
	A. Surveillance	B. Cohort study	
	C. Incidence	D. None of these	
931)	Total mortality rate of all disease is known as-----		A
	A. Death rate	B. Mortality	
	C. Case fatality	D. Morbidity	
932)	Map where line joining equal morbidity rate is ----- and mortality rate is-----		A
	A. Isomorbs, isomorts	B. Isomer, Isomorate	
	C. Ascendance, ascendance rate	D. Isomorbs, Isomorb rate	
933)	----- is any characteristic that affects the health of a population		A
	A. Determinant	B. Prevalence	
	C. Incident	D. None of these	
934)	Epidemiological triads are-----, ----- &-----		A
	A. Host, agent and environment	B. Host, environment	
	C. Host, pathogen	D. Agent, environment	

935)	Ability of organism to cause disease in a particular host , in terms of severity is known as-----	A. Virulence	B. Hot spot	A
		C. Pathogenicity	D. None of these	
936)	----- is quality of disease induction	A. Virulence	B. Hot spot	C
		C. Pathogenicity	D. None of these	
937)	Sites within genome that frequently mutate	A. Virulence	B. Hot spot	B
		C. Pathogenicity	D. None of these	
938)	Infection of susceptible host without overt clinical sign	A. Inapparent infection	B. Persistent infection	A
		C. Carrier	D. Chronic infection	
939)	----- is any animal sheds an agent without clinical sign	A. Inapparent infection	B. Persistent infection	C
		C. Carrier	D. Chronic infection	
940)	Animal which excretes agents during incubation period is known as-----	A. Incubatory carrier	B. Incidence Carrier	A
		C. Chronic carrier	D. All of these	
941)	----- Climate comprises of normal component weather to which animal are exposed	A. Macro	B. Pathogen	A
		C. Micro	D. None of these	
942)	Infection transmitted from one segment of population to another segment of the population is known as-----	A. Horizontal transmission	B. Generation time	A
		C. Vertical transmission	D. Extrinsic incubation period	
943)	Infection transmitted from one generation to next generation is known as-----	A. Horizontal transmission	B. Generation time	C
		C. Vertical transmission	D. Extrinsic incubation period	
944)	----- is the period between infection and maximum infectiousness	A. Horizontal transmission	B. Generation time	B
		C. Vertical transmission	D. Extrinsic incubation period	
945)	Time between infection and availability of agent in an arthropod vector is known as-----	A. Horizontal transmission	B. Generation time	D
		C. Vertical transmission	D. Extrinsic incubation period	
946)	----- relates the amount of organism required to initiate an infection	A. Infectivity	B. Phase variation	A
		C. Stability	D. None of these	
947)	The length of time for which and organism can remain infective outside its host is known as the -----	A. Infectivity	B. Phase variation	C
		C. Stability	D. None of these	
948)	Switch from virulence to non-virulence	A. Infectivity	B. Phase variation	B
		C. Stability	D. None of these	
949)	Rain forest are described as----- whereas deciduous forest is -----	A. Megatherms and mesotherms	B. Rainology, exhibiting	A
		C. Thermoform, forestry	D. None of these	
950)	----- is the natural restriction where animal can roam	A. Home range	B. Group behavior	A
		C. Territory	D. Niche	
951)	Part of the animal home range that it defends aggressively from invaders is known as-----	A. Home range	B. Group behavior	C
		C. Territory	D. Niche	
952)	According to Wynne Edward hypothesis population control was the main purpose of -----	A. Home range	B. Group behavior	B
		C. Territory	D. Niche	

953)	Which is the functional position of an animal in an ecosystem?		D
	A. Home range	B. Group behavior	
	C. Territory	D. Niche	
954)	Avoidance of competition is usually in -----animals		A
	A. Sympatric animals	B. Biotope	
	C. Biocenosis	D. Anthropurgic	
955)	Which is the smallest spatial unit providing uniform condition for life?		B
	A. Sympatric animals	B. Biotope	
	C. Biocenosis	D. Anthropurgic	
956)	Collection of all living organism in a biotope is known as-----		C
	A. Sympatric animals	B. Biotope	
	C. Biocenosis	D. Anthropurgic	
957)	Man-made ecosystem		D
	A. Sympatric animals	B. Biotope	
	C. Biocenosis	D. Anthropurgic	
958)	function of two ecosystem is known as-----		A
	A. Ecological interface	B. Biotope	
	C. Biocenosis	D. Anthropurgic	
959)	----- is the modified patch of vegetation, created by man, with in a biome that has reached in a climax		A
	A. Ecological mosaic	B. Landscape epidemiology	
	C. Nidi	D. Nosogenic area	
960)	Study of disease in relation to ecosystem in which they are found is known as-----		B
	A. Ecological mosaic	B. Landscape epidemiology	
	C. Nidi	D. Nosogenic area	
961)	Foci of infection		C
	A. Ecological mosaic	B. Landscape epidemiology	
	C. Nidi	D. Nosogenic area	
962)	An area that has ecological, social, and environmental condition that can support a disease is known as-----		D
	A. Ecological mosaic	B. Landscape epidemiology	
	C. Nidi	D. Nosogenic area	
963)	----- is a nosogenic territory in which a particular disease is present		D
	A. Ecological mosaic	B. Landscape epidemiology	
	C. Nidi	D. Noso-area	
964)	If all animal in a population is surveyed, then it is known as-----		A
	A. Census	B. Landscape epidemiology	
	C. Ecological mosaic	D. Noso-area	
965)	If relative risk is more than one it denotes-----		A
	A. Positive statistical association between factor and disease	B. No statistical association between factor and disease	
	C. Negative statistical association between factor and disease	D. None of these	
966)	----- is the decrease in mortality and morbidity		A
	A. Control	B. Eradication	
	C. Vaccination and quarantine	D. Convalescent carriers	
967)	Examples for primary prevention		C
	A. Control	B. Eradication	
	C. Vaccination and quarantine	D. Convalescent carriers	
968)	Animal which excretes agents during recovery period is known as-----		D
	A. Control	B. Eradication	
	C. Vaccination and quarantine	D. Convalescent carriers	
969)	Extinction of an agent		B
	A. Control	B. Eradication	
	C. Vaccination and quarantine	D. Convalescent carriers	

970)	culling of infected animals during epidemic is often accompanied by the slaughter of animals that may have been exposed to infection and therefore be at risk of developing disease is known as -----	A. Pre-emptive slaughtering	B. Eradication	A
		C. Vaccination and quarantine	D. All of these	
971)	Proportion of animals that are resistant to infection or disease in population	A. Herd immunity	B. Pre-emptive slaughtering	A
		C. Individual immunity	D. All of these	
972)	Koch's postulates were derived by using which bacterium?	A. <i>Bacillus anthracis</i>	B. <i>Vibrio parahaemolyticum</i>	A
		C. <i>Pasteurella multocida</i>	D. None of these	
973)	Kanagawa reaction is exhibited by...	A. <i>Bacillus anthracis</i>	B. <i>Vibrio parahaemolyticum</i>	B
		C. <i>Pasteurella multocida</i>	D. None of these	
974)	Father of Microbiology	A. Louis Pasteur	B. Robert Koch	A
		C. Edward Jenner	D. None of these	
975)	Father of Bacteriology	A. Louis Pasteur	B. Robert Koch	B
		C. Edward Jenner	D. None of these	
976)	Smallpox vaccine was developed by -----in the year 1796	A. Louis Pasteur	B. Robert Koch	C
		C. Edward Jenner	D. None of these	
977)	Rabies vaccine was first done on	A. 6 July 1885	B. 6 July 1875	A
		C. 6 July 1895	D. 6 July 1865	
978)	Loeffler and Frosch shares the credit of discovery of-----	A. FMD Virus	B. Picornaviridae	D
		C. Aphthovirus	D. All of these	
979)	Instrument used to perform the Polymerase Chain Reaction	A. Thermocycler	B. Hot plate	A
		C. ELISA reader	D. Water bath	
980)	Bacteria was first time identified by-----in----	A. Antoni van Leeuwenhoek, 1676	B. Louis Pasteur, 1885	A
		C. Robert Hooke, 1665	D. None of these	
981)	Who described the fruiting structures of molds in	A. Antoni van Leeuwenhoek, 1676	B. Louis Pasteur, 1885	C
		C. Robert Hooke, 1665	D. None of these	
982)	The first cholera pandemic occurred in the	A. Bengal region of India, in 1817	B. African region, in 1717	A
		C. Bengal region of India, in 1917	D. None of these	
983)	Chikungunya is a viral disease transmitted to humans through the bites of mosquitoes infected with the chikungunya virus. It was first described during an outbreak in	A. Southern Tanzania in 1952	B. African region, in 1717	A
		C. Bengal region of India, in 1817	D. None of these	
984)	Epidemiologic studies can be used for many reasons, commonly to estimate _____ of a disease and find associations suggesting potential causes of a disease.	A. The frequency	B. Existence	D
		C. The distribution	D. All of these	
985)	_____ are commonly used in investigations of disease in groups of easily identified people such as workers at a particular factory or attendees at a wedding	A. Surveillance	B. Retrospective-cohort study	B
		C. Incidence	D. None of these	
986)	Number of COVID-19 cases reported in Pakistan till 09-09-2021	A. 1.19 million	B. 19 million	A

	C. 1.19billion	D. 19 billion	
987)	Coronavirus disease (COVID-19) was first reported from -----on 31 December 2019		A
	A. Wuhan	B. Korea	
	C. Italy	D. None of these	
988)	In humans, fungal infections occur when an invading fungus takes over an area of the body and is too much for the immune system to handle. Fungi can live in the		A
	A. Air, soil, water, and plants	B. Soil, water, and Plants	
	C. Air, water	D. Air, water, and Plants	
989)	Chicken infectious anemia (CIA) is an immunosuppressive disease that causes great economic loss in poultry industry globally. This disease is caused by chicken anemia virus (CAV), an icosahedral and single-stranded DNA virus that is transmitted both		D
	A. Vertically and horizontally	B. Mother to of spring and Horizontal	
	C. Transstadial and vertical	D. All of these	
990)	Nicolle and Manceaux first described the Toxoplasma in 1908, after they observed the parasites in the blood, spleen, and liver of a North African		A
	A. Rodent	B. Feline	
	C. Human	D. Monkies	
991)	Humans commonly acquire Toxoplasma gondii infection by -----contaminated with the resistant stage of the parasite (oocyst) shed in the faeces of infected cats or by ingesting the encysted stage of the parasite (tissue cysts) in infected meat		A
	A. Ingesting food and water	B. Eating meat only	
	C. Ingesting offal	D. None of these	
992)	The first Asiatic cholera pandemic or Asiatic cholera Outbreak occur in 1920 Spanish Flu,		A
	A. 1820	B. 1920	
	C. 1720	D. 2020	
993)	The first great plague pandemic to be reliably reported occurred during the reign of the Byzantine emperor Justinian I in the		C
	A. 1820	B. 1920	
	C. 1720	D. 2020	
994)	Spanish flu was the first of three flu pandemics caused by H1N1 influenza A virus occur in		B
	A. 1820	B. 1920	
	C. 1720	D. 2020	
995)	COVID-19 Pandemic occur in		D
	A. 1820	B. 1920	
	C. 1720	D. 2020	
996)	-----an anesthesiologist, is famous for his investigations into the causes of the 19th century cholera epidemics and is also known as the father of modern epidemiology		A
	A. John Snow	B. Louis pasture	
	C. Robert Koch	D. None of these	
997)	Tetanus bacteria live in----- and it can also be found in the human intestine and other places		A
	A. Soil and manure	B. Grass and water	
	C. Water and Soil	D. None of these	
998)	The risk of death from tetanus is highest among people of		A
	A. 65 years old or older	B. All age groups	
	C. Young ones	D. Adults of 35-45 years	
999)	-----are the most commonly reported syndromes of foodborne viruses		A
	A. Gastroenteritis and hepatitis	B. Renal syndrome and hepatitis	
	C. Gastroenteritis and Renal syndrome	D. None of these	
1000)	In Pakistan, waterborne diseases are typhoid, giardiasis, intestinal worms, diarrhea, cryptosporidium infections, and gastroenteritis. Infant deaths caused by water-related diarrhea are -----in Pakistan according to International Union on Conservation of Nature (IUCN) report, which is the highest ratio in Asia		A
	A. 60%	B. 30%	
	C. 50%	D. 40%	

