

ANSWER KEY

SECOND YEAR HIGHER SECONDARY EXAMINATION, MARCH 2020.

PART III GEOLOGY

CODE No: SY-29

SCORES : 60
2 HOURS

$\frac{1}{7}$

Qn No.	Sub Ans	Value Points	Score	Total Score
		<u>SECTION I</u>		
		Answer all questions from 1 to 6. Each carries 1 score (6 x 1 = 6 scores)		
1		Biogas	1	1
2		Conglomerate	1	1
3		Basalt	1	1
4		heavy rainfall	1	1
5		Ilmenite	1	1
6		H. H. Reid	1	1
		<u>SECTION II</u>		
		Answer any 7 questions from 7 to 16. Each carries 2 scores. (7 x 2 = 14 scores)		
7		- increase in CO ₂ , global warming, greenhouse effect, air pollution, climate change, any two	1	2
8		- industries, pesticides, chemicals, septic tanks, waste disposal sites - any two	1	2
9		Relative dating:- does not tell numerical age; tells which one is older or younger. Absolute dating:- Specifies actual no. of years passed after the event, assigns age precisely in years.	1	2
10		- for estimating the age of a rock strata - for correlation of rock strata - for preparing the Geologic Time Scale - for the dating of geologic events - identification of chronostratigraphic units - OR any two uses of fossils (Any Two)	1	2

Qn No.	Sub Qns.	Value Points	(2/7)	Score	Total Score
11		<ul style="list-style-type: none"> - indicates relative ages - eg. intrusions are younger than the rocks that cut or intrude into. <p style="text-align: center;">OR</p> <ul style="list-style-type: none"> - diagram only. 	2 2	2	2
12		<ul style="list-style-type: none"> - diagram of an anticline or explanation (convex upward, core of older rocks) - diagram of a Syncline or explanation (convex downward, core of younger rocks) 	1 1	2	2
13		<ul style="list-style-type: none"> - diagram of rock cycle - cyclic changes in rocks - process of melting, crystallisation, erosion, sedimentation, lithification, metamorphism; evolution through years. <p style="text-align: center;">(proper diagram - 1, labelling - 1)</p>	2	2	2
14		<ul style="list-style-type: none"> - Phaneritic, aphanitic, porphyritic, holocrystalline, microcrystalline, holoblastic, glassy, frothy or vesicular - Any Two 	1 1	2	2
15		<ul style="list-style-type: none"> - dyke - a tabular discordant wall like igneous intrusion that cuts across the planar structures of the surrounding rock <p style="text-align: center;">OR diagram</p> <ul style="list-style-type: none"> - sill - a tabular concordant igneous intrusion that parallels the planar structure of the surrounding rock <p style="text-align: center;">OR diagram</p>	1 1	2	2
16		<ul style="list-style-type: none"> - migration is controlled by physical and physico-chemical conditions of the sedimentary strata through which the oil is moving. - in order to be collected into an economically valuable deposit, migration of oil or gas is necessary - petroleum is less dense than water or rock, hence it rise through the permeable rock until it is trapped within the rock or escapes onto the earth. - migration continues as long as it does not encounter structural configurations where the reservoir strata form traps. <p style="text-align: center;">(Any TWO points/any relevant points)</p>	1 + 1	2	2

Qn No.	Sub Qns.	Value Points SECTION III (Qn 17 to 27) 3 Score each (8x3=24 Score)	Score	Total Score															
17		<p>presence of hard parts - quick burial after death - free from physical, chemical and biological weathering - free from scavenging animals (Any Three points)</p> <p>Because of these requirements only a very small number of plants and animals are preserved as fossils.</p>	3	3															
18	<p>a) Surface waves</p> <p>b) Primary/P/compressional/push-pull/longitudinal waves</p> <p>c) Secondary/S/shear/transverse/shake waves</p>		1 1 1	3															
19		<p>- create new aquifers through land reclamation and natural recharge,</p> <p>- develop methodologies for unconventional energy production,</p> <p>- reduce wastage of energy resources during production, storage and transport,</p> <p>- provide adequate lining underneath the waste disposal pit,</p> <p>- avoid dumping wastes on permeable beds and prevent leakage to aquifers.</p> <p>(Any THREE points/Three relevant points)</p>	3	3															
20	<p>a) limestone/coral reef/chalk/coal</p> <p>b) granite/dunite/gabbro/pegmatite</p> <p>c) slate/schist/gneiss/phyllite</p>		1 1 1	3															
21	<table border="0"> <tr> <td><u>A</u></td> <td><u>B</u></td> <td><u>C</u></td> </tr> <tr> <td>Gypsum</td> <td>evaporite</td> <td>plaster of paris</td> </tr> <tr> <td>Graphite</td> <td>metamorphic</td> <td>pencil</td> </tr> <tr> <td>Bauxite</td> <td>residual</td> <td>aluminium</td> </tr> <tr> <td></td> <td>A to B / A to C / B to C</td> <td></td> </tr> </table>	<u>A</u>	<u>B</u>	<u>C</u>	Gypsum	evaporite	plaster of paris	Graphite	metamorphic	pencil	Bauxite	residual	aluminium		A to B / A to C / B to C			1 1 1	3
<u>A</u>	<u>B</u>	<u>C</u>																	
Gypsum	evaporite	plaster of paris																	
Graphite	metamorphic	pencil																	
Bauxite	residual	aluminium																	
	A to B / A to C / B to C																		
22	<p>a) magnitude refers to the amount of energy released by the quake / is a measure of strength of an earthquake</p> <p>b) Richter Scale</p> <p>c) using Mercalli Scale, defines the intensity of an earthquake by the amount of damage it does and how much shaking is felt.</p>		1 1 1	3															

Qn No.	Sub Qns.	Value Points	(4/7)	Score	Total Score
23		<p>- pre-disaster phase - before a disaster</p> <p>- disaster occurrence phase - during a disaster</p> <p>- post-disaster phase - after a disaster</p> <p>OR</p> <p>preparedness, response, recovery, mitigation. (any three)</p>			3
24		<p>→ Most earthquakes occur along relatively narrow belts that coincide with tectonic plate boundaries</p> <p>→ seismic belts of the world</p> <p>① the Circum Pacific belt</p> <p>② the Mediterranean and Trans-Asiatic Himalayan belt.</p> <p>OR</p> <p>→ any relevant points on distribution of earthquake, plate motion, plate boundaries.</p>			3
25	a)	strike - the direction or trend that a structural surface makes as it intersects an imaginary horizontal plane.	1		
	b)	dip of any geological feature is always expressed in terms of its angle and its direction. The geographic direction towards which a geological or structural feature dip is its dip direction.	1		
	c)	the inclination of a structural feature will be maximum in a direction perpendicular to the strike and the inclination measured is termed true dip.	1		3
26		<p>- an unconformity is a surface of erosion or non-deposition occurring within a sequence of rocks and that separates younger strata from older rocks.</p> <p>- name or diagram of any TWO unconformities</p> <p>OR</p>		1	
			2		

Qn No.	Sub Qns	Value Points	Score	Total Score
		<div> <div> <div>5</div> <div>7</div> </div> </div>		5
		- diagram of the three unconformities OR - explanation of any one unconformity		3
27	a) levees b) offshore structures built parallel to the shoreline to absorb the force of large breaking waves and provide quiet water near shore c) volcano/tsunami/storm (any two from a, b, or c)		1 1 1	3
28	SECTION IV Answer any 4 questions from 28 to 32. Each carries 4 scores (4x4 = 16 scores) <u>Peat</u> - lowest grade - first stage in coalification, - higher moisture content. <u>Lignite</u> - ranked higher to peat, brown coal, carbon below 70%, volatile matter and moisture less than that of peat <u>Bituminous coal</u> - caking/spl coal, black colour, carbon content 80%, harder than lignite, coherent. <u>Anthracite</u> - highest rank of coal, hardest, does not soil fingers, low moisture and volatiles, burns without smoke, high calorific value → Name of four types of coal (1+1+1+1) OR → characteristics of any two types of coal (2+2)		4	
29	a) simple crystallisation without concentration OR any two relevant points on magmatic dissemination. OR diagram b) one or more minerals crystallise and segregates into a separate body OR any two relevant points on magmatic segregation. OR diagram		2 2	4

Qn No.	Sub Qns.	Value Points	Score	Total Score
30		<p>- deforestation - land degradation and land pollution - land subsidence - landslide - accumulation of quarry waste - water pollution - acid mine drainage - lowering of water table - (air pollution - noise pollution - destruction of habitats - damage to bio-diversity)</p> <p>any FOUR 1+1+1+1</p>	<div style="border: 1px solid black; border-radius: 50%; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center; margin: 0 auto;"> <div style="text-align: center;">6 7</div> </div>	<div style="text-align: center;">6 7</div>
31		<p><u>Causes of landslides</u>:- steep slope, deforestation, torrential rainfall, slope modification, unscientific land use, cultivation and building construction.</p> <p><u>Mitigation</u>:- proper land use, reforestation, proper drainage, construction of retaining wall, buttresses, stabilization of slopes, enplacing of rock bolts, rock anchors etc.</p> <p>→ TWO causes of landslides 2</p> <p>TWO mitigation measures 2</p> <p style="text-align: center;">OR</p> <p>→ Any FOUR relevant points on landslides</p>		<div style="text-align: center;">4</div>
32		<p>Ⓐ disaster:- a situation in which the community is incapable of coping.</p> <p>Ⓑ risk:- is a measure of the expected losses due to a hazard event occurring in a given area over a specific time period.</p> <p>Ⓒ vulnerability:- the extent to which a community, structure, services or geographic area is likely to be damaged or disrupted by the impact of particular hazard, on account of their nature, construction and proximity to hazardous terrains or a disaster prone area</p> <p>Ⓓ capacity:- resources, means and</p>		

Qn No.	Sub Qns.	Value Points	Score	Total Score
		<p>strengths that exist in households, people and communities and which enable them to cope with, withstand, prepare for, prevent, mitigate or quickly recover from a disaster.</p> <p>(Any TWO 2+2)</p> <hr/> <p>SAJEEVE ARRIKAT & TEAM 08199 GHSS V.R. Puram Chalaky, Thiruvallur Dist. 9495062469</p>	<p>(7/7)</p> <p>4</p>	<p>7/7</p>

ANSWER KEY

SECOND YEAR HIGHER SECONDARY EXAMINATION MARCH 2020

PART III

SUBJECT:- COMPUTER SCIENCE

CODE NO : SY-30

60 SCORES

2 HOURS

Qn	Sub Qn	Answer key/value points	Score	Total score
1		Base/Parent class	1	1
2		new	1	1
3		 //<hr>/any correct one tag	1	1
4		Type	1	1
5		A record/DNS	1	1
6		Information and Communication Technology	1	1
7		Definition/Example/Syntax	2	2
8		Any one difference	2	2
9		Any two advantages 1 score each	2*1	2
10		If(REAR<N)then REAR=REAR+1 Q[REAR]=ITEM Else Print "Overflow" OR Program OR Algorithm format only 1 score	2	2
11		Definition/Advantages/Any point	2	2
12		var x,y; X=10; Y="Javascript" (Any one statement ie number or string is enough)	1 1	2
13		Any one built in function with explanation OR Two names only alert(),isNaN() etc	2	2
14		Any two advantages	2*1	2
15		Degree-No of columns Cardinality –No of rows OR Examples 2 scores	2*1	2
16		Any two differences OR Examples 2 scores	2*1	2
17		Robotics,Biometric,Computer vision etc(Any two names only)	2*1	2
18		G2G,G2C,G2B.G2E - OR Any two with full form	½ *4	2
19		e-Book,e-text,online chat (name only give FULL SCORE)	3*1	3

Answer key.

SECOND YEAR HIGHER SECONDARY EXAM - MARCH/2020 ELECTRONICS

TOTAL = 60 scores.

Qn No	Sub Qn	Answer key/ Value points	Score	Total score
1		GV		1
2		1		1
3		sequential circuit		1
4		Mixer		1
5		Quantization		1
6		Dispersion or widening.		1
7		Additive color mixing.		1
8		Cache memory.		1
9		FTP (File transfer protocol)		1
10		Macro cells		1
11		Diagram - 1 score, explanation - 1 score	1+1	2
12		Write any two need (1 score for each)		2
13		Block diagram of transmitter - 1 " of receiver - 1	1+1	2
14		Surface wave - 1 Sky wave - 1	1+1	2
15		Theorem statement or $f_s \geq 2f_m$ - 1 Any example like if $f_m = 2\text{kHz}$, then $f_s \geq 4\text{kHz}$	1+1	2
16		Any four input devices ($\frac{1}{2}$ score for each)	$\frac{1}{2} \times 4$	2

Qn No.	Sub Qn	Answer key / valuation points	Score	Total Score
17		Any two advantages (1 score for each)		2
18		Block diagram - 1 score Explanation (brief) - 1 score	1+1	2
19	a	Names of 4 shift registers - ($\frac{1}{4} \times 4 = 1$)	1	3
	b	Block diagram of SISO - 2	2	
20		Block diagram - 2 score Explanation - 1 score	2+1	3
21		Names of 3 different optical fibers ($\frac{1}{2} \times 3$) diagram of each ($\frac{1}{2} \times 3$) or explanation of each ($\frac{1}{2} \times 3$)	1.5 1.5	3
22		Any three application of satellite (1x3=3)		3
23		Interlaced scanning: diagram - $1\frac{1}{2}$ explanation - $1\frac{1}{2}$		3
24		Block diagram (complete).		3
25		Differences - 1 score Examples - 2 score	1+2	3
26		Explanation or Expansion of PSTN - 1 score. PSTN parts - 1 working - 1		3
27		Block diagram - 2 score working - 2	2+2	4
28		Each clipper - circuit diagram - $\frac{1}{2}$ score wave forms - $\frac{1}{2}$ score } 1 score	4x1	4
29		circuit diagram - 2 Explanation - 2		4

Qn No	Sub Qn	Answer key/Valuation points	Score	Total Score
30		AM spectrum drawing - 2 score. BW calculation - 2 score & explanation	2+2	4
31		Writing the names of any 4 network topologies - $4 \times \frac{1}{2} = 2$ score Drawing these 4 topologies - $4 \times \frac{1}{2} = 2$ score	2+2	4
32	a	Any introduction to GPS system - 1	1	4
	b	No: of satellites - $21+3=24$ - 1 score (Give score to 21 as well as 24)	1	
	c	Brief working of GPS system - 2	2	
<p>Aneesh Kumar.T.V <u>Aneesh</u> 9744317040</p>				

Second Year Higher Secondary Examination, March 2020

Subject: STATISTICS

Code: SY 32

Qn No.	Answer key/Value points	Split Score	Total Score
1	Definition of cyclical variation OR Explanation of cyclical variation with or without diagram OR Two examples of cyclical variation	2	2
2(a)	(i) Perfect positive	1	2
2(b)	(iii) 0	1	
3(a)	(ii) perpendicular OR any other option	1	2
3(b)	$x = \frac{-3}{2}y + \frac{8}{2}$ $b_{xy} = \frac{-3}{2}$ <i>Note: if 3(b) is only attempted and correct then give 2 score</i>	1	
4	(i) positive correlation (ii) negative correlation (iii) zero or nonsense correlation (iv) positive correlation	$\frac{1}{2}$ $\frac{1}{2}$ $\frac{1}{2}$ $\frac{1}{2}$	2
5	$\frac{dy}{dx} = 3x^2 - 48x + 8$ $\frac{d^2y}{dx^2} = 6x - 48$	1 1	2
6(a)	np chart OR p chart OR C chart	1	2
6(b)	Explanation OR model diagram of control chart	1	
7(a)	(ii) 0.5	1	2
7(b)	(ii) Poisson	1	
8	$\lambda = 3$ P (at least one breakdown) = $P(X \geq 1) = 1 - P(X = 0)$ $= 1 - \frac{e^{-3} \times 3^0}{0!} = 1 - 0.0498 = 0.9502$ <i>Note: Writing the pdf of poisson density function give 1 score</i>	1 $\frac{1}{2}$ $\frac{1}{2}$	2
9	Definition of consumer price index OR Any other explanation of consumer price index OR Any two uses of consumer price index	2	2
10	(i) – (b), (ii) – (d), (iii) – (a), (iv) – (c)	$4 \times \frac{1}{2}$	2

Qn. No.	Answer key/Value points	Split Score	Total score
11	$\bar{x} = 248.2, s = 4, n = 150$ 95% confidence interval for the population mean is given by $\left(\bar{x} - \frac{s}{\sqrt{n}} z_{\alpha/2}, \bar{x} + \frac{s}{\sqrt{n}} z_{\alpha/2} \right)$ $= \left(248.2 - \frac{4}{\sqrt{150}} \times 1.96, 248.2 + \frac{4}{\sqrt{150}} \times 1.96 \right)$ $= (247.56, 248.84)$ <i>Note: Taking standard deviation as s or σ can be admissible</i> <i>If anyone finding 99% C.I instead of 95% then award 1 ½ score</i>	½ ½ ½ ½	2
12	Level of significance- Definition OR Explanation Power of the test - Definition OR Explanation	1 1	2
13	$CL, \bar{\bar{x}} = \frac{\sum x}{m} = \frac{305}{25} = 12.2$ $\bar{R} = \frac{\sum R}{m} = \frac{210}{25} = 8.4$ $UCL = \bar{\bar{x}} + A_2 \bar{R} = 12.2 + 0.729 \times 8.4 = 18.3236$ $LCL = \bar{\bar{x}} - A_2 \bar{R} = 12.2 - 0.729 \times 8.4 = 6.076$ <i>Note: for right procedure give 2score</i>	½ ½ 1 1	3
14(a)	(i) Unbiased	1	3
14(b)	Moment estimate of $\mu = \bar{x}$ $= \frac{\sum x}{n} = \frac{644}{10}$ ie, Moment estimate = 64.4	½ 1 ½	
15	No. of samples, $NC_n = 5C_2 = 10$ $E(\bar{x}) = \frac{\sum x}{n} = \frac{140}{10} = 14$ $V(\bar{x}) = \left(\frac{N-n}{N-1} \right) \frac{\sigma^2}{n}$ $= \left(\frac{5-2}{5-1} \right) \times \frac{2}{2} = 0.75$ $\therefore SE(\bar{x}) = \sqrt{0.75} = 0.866$ <i>Note: If solved using SRSWR formula give 2 score</i>	½ 1 ½ ½ ½	3

16(a)	(iii) 0.99 OR (iv) 1	1	3
16(b)	(i) Mean = 80 (ii) Variance = $12^2 = 144$ (writing $sd = 12$, give $\frac{1}{2}$ score) (iii) $P(X > 80) = P\left(\frac{X - 80}{12} > \frac{80 - 80}{12}\right)$ $= P(Z > 0) = 0.5$ <i>Note: If any 2 of (i), (ii) or (iii) are correct, give 2 score.</i>	$\frac{1}{2}$ $\frac{1}{2}$ $\frac{1}{2}$ $\frac{1}{2}$	
17	$P(X < 90) = 0.8315$ ie, $P\left(Z < \frac{90 - 75}{\sigma}\right) = 0.8315$ Using statistical table, $\frac{90 - 75}{\sigma} = 0.96$ $\therefore \sigma = \frac{15}{0.96} = 15.625$ <i>Note: Give full score for finding the answer using alternate methods</i>	1 1 1	
18(a)	(i) $P(X \leq x)$	1	
18(b)	$F(x) = \begin{cases} 0, & \text{when } x < 0 \\ \int_0^x 3x^2 dx = x^3, & \text{when } 0 \leq x \leq 1 \\ 1, & \text{when } x > 1 \end{cases}$ <i>Writing definition or formula of cdf give 1 score</i>	$\frac{1}{2}$ 1 $\frac{1}{2}$	3
19	(a) $E(X) = \sum xp(x) = \frac{82}{20} = 4.1$ (b) $E(X^2) = \sum x^2 p(x) = \frac{398}{20} = 19.9$ $V(X) = E(X^2) - (E(X))^2 = 3.09$	1 1 1	3
20(a)	(ii) 16	1	3
20(b)	Explanation of assignable causes Explanation of chance causes <i>Note: Give 2 score if examples of assignable causes and chance causes are given without explanation.</i>	1 1	
21	$CF = \frac{G^2}{N} = \frac{212^2}{16} = 2809$ $TSS = \text{Sum of squares of all observations} - CF$ $= 4218 - 2809 = 1409$ OR <i>Constructing the structure of ANOVA table give 3 score</i> <i>Note: The numerical values given in the question are logically incorrect. Given $SSB = 3848$. If calculation is done with this value, SSW becomes a negative quantity. So attempting to answer with valid steps give 3 score</i>	$1 \frac{1}{2}$ $1 \frac{1}{2}$	3

22(a)	Any option, give full score.	1	3																																															
22(b)	Marginal cost function, $MC(x) = 3x^2 - 5x + 7$ Total cost function = $\int MC(x)dx$ $= \int (3x^2 - 5x + 7)dx = x^3 - \frac{5}{2}x + 7x + C$	1 1																																																
23	For estimating the score in theory (X) of a student whose practical score (Y) is given, we use the regression equation of X on Y. $x - \bar{x} = b_{xy}(y - \bar{y})$ Where $b_{xy} = \frac{r \times \sigma_x}{\sigma_y} = \frac{0.62 \times 5.7}{2.5} = 1.41$ The regression equation becomes, $x - 40 = 1.41(y - 35)$ When $y = 39$, $x - 40 = 1.41(39 - 35) \Rightarrow x = 45.64$	$\frac{1}{2}$ $\frac{1}{2}$ 1 $\frac{1}{2}$ $\frac{1}{2}$																																																
24(a)	(iii) 0.48	1	3																																															
24(b)	$\sum d^2 = 1 + 4 + 0 + 1 + 4 + 9 + 1 = 20$ $\rho = 1 - \frac{6 \sum d^2}{n^3 - n}$ $= 1 - \frac{6 \times 20}{7^3 - 7} = 1 - 0.357 = 0.643$	$\frac{1}{2}$ 1 $\frac{1}{2}$																																																
25	<table border="1"><tr><td>P_1</td><td>P_0</td><td>q_1</td><td>q_0</td><td>P_1q_1</td><td>P_1q_0</td><td>P_0q_1</td><td>P_0q_0</td></tr><tr><td>80</td><td>65</td><td>4</td><td>5</td><td>320</td><td>400</td><td>260</td><td>325</td></tr><tr><td>90</td><td>72</td><td>3</td><td>3</td><td>270</td><td>270</td><td>216</td><td>216</td></tr><tr><td>68</td><td>58</td><td>4</td><td>2</td><td>272</td><td>136</td><td>232</td><td>116</td></tr><tr><td>57</td><td>40</td><td>2</td><td>3</td><td>114</td><td>171</td><td>80</td><td>120</td></tr><tr><td colspan="4">Total</td><td>976</td><td>977</td><td>788</td><td>777</td></tr></table> (a)Laspeyre's Index Number, $L = \frac{\sum P_1q_0}{\sum P_0q_0} \times 100 = \frac{977}{777} \times 100 = 125.74$ (b)Paasche's Index Number, $P = \frac{\sum P_1q_1}{\sum P_0q_1} \times 100 = \frac{976}{788} \times 100 = 123.86$ (c)Fishers Index Number= $= \sqrt{L \times P} = \sqrt{125.74 \times 123.86} = 124.8$ Note: for correct procedure give 3 score	P_1		P_0	q_1	q_0	P_1q_1	P_1q_0	P_0q_1	P_0q_0	80	65	4	5	320	400	260	325	90	72	3	3	270	270	216	216	68	58	4	2	272	136	232	116	57	40	2	3	114	171	80	120	Total				976	977	788	777
P_1	P_0	q_1	q_0	P_1q_1	P_1q_0	P_0q_1	P_0q_0																																											
80	65	4	5	320	400	260	325																																											
90	72	3	3	270	270	216	216																																											
68	58	4	2	272	136	232	116																																											
57	40	2	3	114	171	80	120																																											
Total				976	977	788	777																																											

SCHEME FINALISATION TEAM

Sl No.	Name	District	School code	Mob. No.
1	BIJU G V	Thiruvananthapuram	01145	9447584301
2	LISSY JOSE	Kollam	02134	9495347637
3	DEEPA KOSHY	Pathanamthitta	03042	9447368815
4	SMITHA M S	Alappuzha	04046	9446418886
5	LATHA S G	Kottayam	05054	9496465889
6	REJANI SATHEESH	Idukki	06054	9497793534
7	Sr. LUSAMMA SEBASTIAN	Ernakulam	07075	9496290754
8	LEELAMMA ZACHARIA	Thrissur	08198	9496290754
9	SAJISH KUMAR M	Palakkad	09050	9447380150
10	ANWAR SHAMEEM Z A	Kozhikkade	10007	9846116783
11	SEBY JOSE P	MAIappuram	11039	9497626293
12	HASIM M C	Kannur	13101	9446270566
13	GAYATHRI K	Kasaragod	14008	9946995789

ANSWER KEY

Second YEAR HIGHER SECONDARY
EXAMINATION March 2020

PART - 1/11/14

SUBJECT: PSYCHOLOGY

CODE NO:
60 SCORES

VERSION: A
2 HOURS

Qn. No.	Sub Qns	Answer key / Value Points	Score	Total Score
1.		a) Morgan and Murray	1	
2.		b) Individual Psychology	1	
3.		c) Raymond Cattell	1	
4.		b) Kobasa	1	
5.		c) Behaviour Therapy	1	
6.		a) Social skills training	1	
7.		b) S.M. Mohsin	1	
8.		b) Audience	1	
9.		d) Social Influence	1	
10.		Body language / Non verbal / Gesture	1	
11.		b) Participant Observation	1	11

Qn No	Sub Qns	Answer key / value Points	Score	Total Score
12.		Write IQ = $\frac{MA}{CA} \times 100$	1	2
		$\frac{20}{20} \times 100$ ie, Rajiv's IQ = 100	1	
13.		Write any one definition of intelligence	1	2
		- Psychometric approach	1/2	
		- Information Processing "	1/2	
14.		Write any two (one mark each) → Professional training required for collection of useful data → Maturity of Psychologist is a Pre condition for obtaining valid data → Mere presence of an observer may contaminate the results, as a stranger the observed may influence the behaviour of the person being observed	1+1	2
15.		Any two Points (one score each) → aim to benefit or do good to another person → be done without expecting anything in return → be done willingly by the person, not because of any kind of pressure → involve some difficulty or cost to the person giving help.	1+1	2

Qn No	Sub Qns	Answer key / Value Points	Score	Total Score
16		<p>Any four (1/2 score each)</p> <ul style="list-style-type: none"> → Reducing air Pollution → Reducing noise Pollution → Planting trees → Managing disposal of garbage → Saying 'No' to Plastics → Reducing the non-bio degradable Packaging of consumer goods → Laws related to construction 	<p>1/2</p> <p>1/2</p> <p>1/2</p> <p>1/2</p>	2
17.		<p>Identify any three (1/2 x 3 = 1 1/2 score)</p> <ul style="list-style-type: none"> → Psychological Test → Case study → Interview → Observation → self report <p>Explaining any three briefly</p>	<p>1 1/2</p> <p>1 1/2</p>	3
18		<p>Write about Project test</p> <p>Briefly narrating about any three Projective tests</p> <ul style="list-style-type: none"> → Rorschach Inkblot Test → TAT → Rosenzweig's PF Study → Sentence Completion Test → Draw a Person Test 	<p>1 1/2</p> <p>1 1/2</p>	3
19		<p>Any three (one score each)</p> <ul style="list-style-type: none"> → minimise opportunities for learning → changing such attitudes → de-emphasising narrow social identity based on ingroup → discouraging the tendency towards self fulfilling prophecy 	<p>1+1+1</p>	3

Qn No.	Sub Qns.	Answer Key / Value Points	Score	Total Score
20.		Write about advantages of classification of disorders Explain DSM - IV Explain ICD - 10	1 1 1	3
21.		Any four from the following (one score each) → Bio feed back → Relaxation techniques → CBT → meditation → Creative visualisation → Exercise	1 1 1 1	4
22.		Explain 1. Any four (one score each) → aversive conditioning → Modelling → Token Economy → Negative reinforcement → Positive reinforcement → Systematic desensitization	1 1 1 1	4
23.		Explain the factors: → Personal experiences → Reference groups → Media-related influences → Family and school environment.	1 1 1 1	4
24.		Explain any four reasons: → Security → Status → Self esteem → Satisfaction of one's Psychological and social needs → goal achievement → Provide knowledge and information	1 1 1 1	4
25.		Write any four and explaining each → Reducing air Pollution → Reducing noise Pollution → Saying no to Plastic → Planting trees → Managing disposal of garbage → Reducing non-biodegradable Packaging of consumer goods → Laws related to construction	1/2+1/2 1/2+1/2 1/2+1/2 1/2+1/2	4

Ques No.	Sub Ques	Answer key / Value Points	Score	Total Score
26		Identifying 4 qualities (^{score} 1/2 each) - authenticity - empathy - Paraphrasing - Positive regard Explaining each (1/2 score each)	$\frac{1}{2} \times 4 = 2$ $\frac{1}{2} \times 4 = 2$	4
27		Naming the theory and the Proposer of the theory of MI Brief introduction Explain types of MI: → Linguistic → Logical-mathematical → Musical → Intrapersonal → Interpersonal → Body-kinesthetic → Spatial → Naturalistic	$\frac{1}{2} + \frac{1}{2}$ 1 $\frac{1}{2} \times 8 = 4$	6
28.		Explain any six (1 score each) → ADHD → Conduct Disorder → SAD → PDD → Eating Disorder → Intellectual Disability → Specific Learning Disorder → Substance Addictive Disorder → Disruptive, Impulsive control Disorder	1 1 1 1 1 1	6
29.		Identifying and Explain any 6 conflict resolution strategies → Introduction of superordinate goals → Altering Perceptions → Increasing intergroup contact → Redrawing group boundaries → Negotiations → Structural solutions → Respect for other other group's norms.	3 3	6
		Dr. Binoy, N. J 949734 8286		

SECOND YEAR HIGHER SECONDARY EXAMINATION, MARCH 2020

SUBJECT: HISTORY

CODE NO: SY 34

Qn. Nos.	Sub. Qns.	Answer key/Value points	Score	Total
1	i. ii. iii. iv.	Mirabai -Bhajans Baba Guru Nanak -Shabad Basavanna -Lingayats Khwaja Muinuddin –Gharib Nawaz	1 1 1 1	4
2	i. ii. iii. iv.	Lumbini Greece Goldsmiths Fa-hien	1 1 1 1	4
3.	i. ii. iii. iv.	Santhals Nana sahib Barout/U.P Rich peasants/peasants	1 1 1 1	4
4.	i. ii. iii. iv.	Guruvayur Sathyagraha – 1931-32 Temple entry proclamation 1936 Punnappara- Vayalar outbreak-1946 Formation of the Kerala State-1956 (Ascending or descending order)	1 1 1 1	4
5.	i. ii. iii.	Pataliputra Rajagriha Taxila, Tosali, Ujjayini, Suvarnagiri (any two)	1 1 2	4
6.		Composed in praise of kings by Harisena –Samudraguptha- Allahabad pillar /Sanskrit (any two)	2x1	2
7.		Bodisatta- great vehicle- worshipped the images of The Buddha- the idea of a savior	2x1	2
8.		Exogamy- marriage outside the kin Endogamy- marriage within the kin	1 1	2
9.		Comparing India with the East and the West- Criticised Indian situation- Binary Opposition	2	2
10.		Khud-Kashta- Residents of the village – held their lands Pahi-Kashta- Non-Resident cultivators – cultivate land on contract basis	1 1	2
11.		Zat- Indicator of position in the imperial hierarchy Sawar- No. of horsemen he had to maintain – mansabdari system- Akbar	1 1	2
12.		Big Platform built by Vijayanagara Rulers- Royal Centre- Dasara- Durga Puja (any two)	2	2

13.		Revenue system in the Bombay Deccan region Directly collected from the ryots based on the measurement of land- share fixed either cash or kind	1 2	3
14.		Amara Nayaka/Military Commanders of the Vijayanagara Dynasty Civil, military and judicial duties – given the rights of the provinces- collected taxes and dues- maintained a fixed army- annual tribute to the king, etc.	1 2	3
15.		Oral History Merits of oral history (any one) Demerits of Oral History (any one)	1 1 1	3
16.		Full of opportunities- densely populated and prosperous- crowded streets- colourful markets- Delhi-Daulatabad – social and cultural activities- bazaars, mosques and temples- space for public performance	4x1	4
17.		Rumours and prophecies related to 1857(cartridges, bone dust of cows and pigs- conspiracies to destroy the castes and religion- end of British rule on the centenary of the Battle of Plassey)	2 2	4
18.		Assembly of Elders- headman-Muqaddam/Mandal- supervise village accounts- fund from contributions- entertaining revenue officials- welfare activities- ensure caste boundaries- authority to levy fines and punishments	4x1	4
19.		Kurinji- Hilly Forest Region – Hunting Mullai – Pastoral tracts – cattle rearing Palai- dry land- plundering Marutam- Wet plains- farming Neital- Coastal Zone - fishing	4	4
20.		Brahmanas- Kshatriyas- Vyshyas- Sudras 1.Study and teach Vedas- perform sacrifices- receive gifts 2.Warfare-protect the people 3.Agriculture, pastoralism, trade 4. serving the three varnas	2 2	4
21.		Abul Fazal Akbar Nama is the most reliable source of Mughal dynasty, especially the reign of Akbar. Collection of three books- first two books(Manzil Abadi, Sipah Abadi)- chronicles Third(Mulk Abadi)-vividly describes social, geographic, administrative and cultural aspects of Akbar's reign	1 1 2 1	5
22.		Relief of Lucknow- Thomas Jones Barker- In memoriam of Joseph Noel Paton- Miss Wheeler- Figure of Justice- Cartoons- Masculine figure of Rani of Jhansi(consider brief explanation about the images)	3 2	5
23.		Early struggles(Champaran, Kheda, Ahmedabad)	2	

		Non-Cooperation Movement (Rowlatt Satyagraha, boycott of schools, colleges and forest laws, workers strike, chauri-chaura, etc.) Salt satyagraha- Dandi March, women's participation- ended with Gandhi Irwin Pact.	3 3	8
24		Mohenjodaro -a planned urban centre-citadel-buildings-platform-houses Great bath Lower town-drainage system-grid pattern Domestic architecture residential buildings-courtyard-bathrooms-wells	2 2 2 2	8
25		Introduction Capital cities-Agra-Fatehpur sikri- Buland Darwaza- shajahanabad-Redfort- Jama masjid Court rules-forms of salutations-sijda, chahar, jaroka darsan-diwan-i-am, Diwan-i-khas festivals	1 3 4	8
26		Early life of Alberuni-Khwarizm-well versed in several languages-Ghazni Kitab-ul-Hind-Arabic-80 chapters-description of various subjects-geometric structure Description of the caste system-comparison with the Persian society-social divisions not unique-social pollution against the laws of nature.	2 3 3	8

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