

**CALCULATION EXAM 2022**  
**SECTION 1 - Total 30 marks**

Calculate the House cusps to within a **degree** for the following two sets of data:

Q1

- |     |                    |                              |
|-----|--------------------|------------------------------|
| (a) | 2 February 2022    | 8.30am                       |
|     | Hobart             | 42S53 147E19                 |
|     | Standard Time Zone | - 10 hours east of Greenwich |
|     | Daylight Savings   | yes – 1 hour                 |

10 marks

LST from both hand calculations and Solar Fire = 16 07 32 [using Southern Tables] and adjusted for Northern Tables = 4 07 32

Closest sidereal time to look up in Table of Houses is therefore

- **16 hours 8 minutes** for Southern Tables
- **and 4 hours 8 minutes** for Northern Tables.

Solar Fire House Cusps

MC = 3 Sag 53

11<sup>th</sup> = 8 Cap 53

12<sup>th</sup> = 10 AQ 47

ASC = 8 Pisces 12

2<sup>nd</sup> = 1 Aries 37

3<sup>rd</sup> = 0 Taurus 19

Houses cusps [hand calculated but not interpolated]

MC = 4 Sag

11<sup>th</sup> = 9 Capricorn 2

12<sup>th</sup> = 10 AQ 56

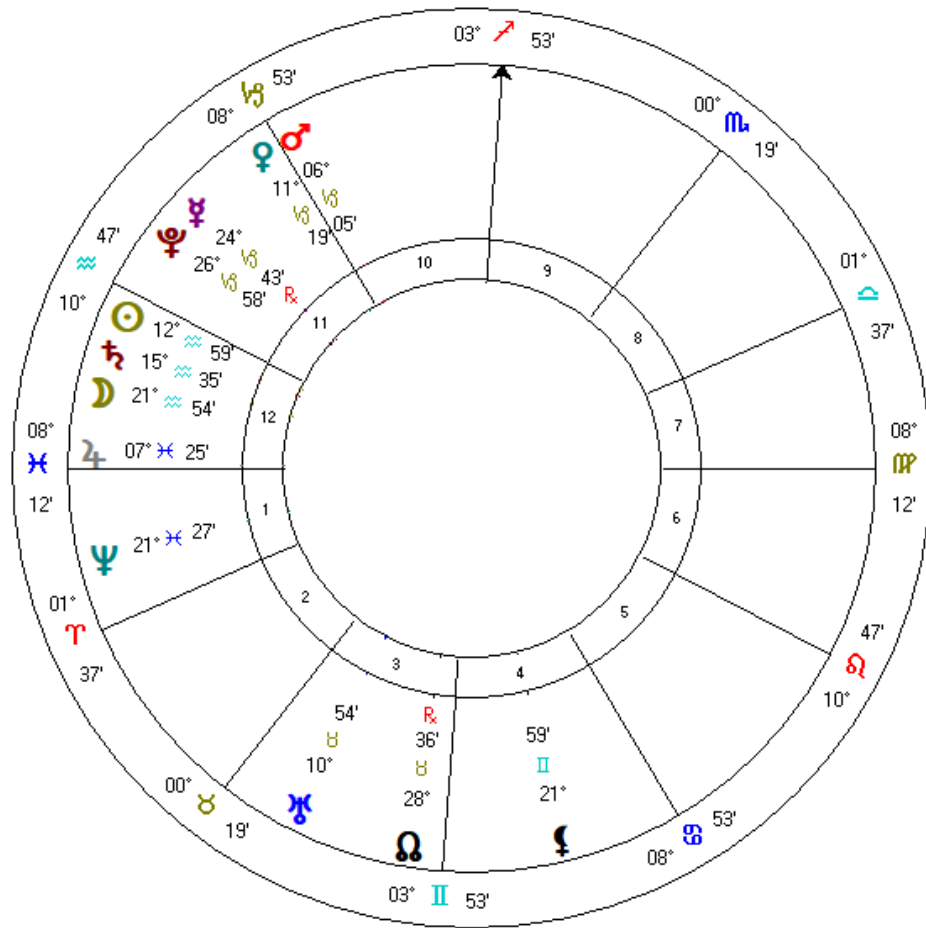
ASC = 8 Pisces 19

2<sup>nd</sup> = 1 Aries 43

3<sup>rd</sup> = 0 Taurus 25

**2022 Calc Exam Q 1**

**Natal Chart**  
 2 Feb 2022, Wed  
 8:30 am AEDT - 11:00  
 Hobart, Australia  
 42°S53' 147°E19'  
*Geocentric*  
*Tropical*  
*Placidus*  
*True Node*



(b)	6 March 1986	2.50pm
	Paris, France	48N52 00E20
	Standard Time Zone	- 1 hour east of Greenwich
	Daylight Savings	No

10 marks

LST from Solar Fire for Northern Tables is **00 55 21** [and hand calculation was 0 55 20] and adjusted for Southern Tables is **12 55 21**

Closest sidereal time to look up in the Table of Houses would therefore be

- **0 56** for Northern Tables
- and **12 56** for Southern tables

Solar Fire House Cusps

MC = 15 Aries 01

11<sup>th</sup> = 23 Taurus 49

12<sup>th</sup> = 3 Cancer 20

ASC = 4 Leo 48

2<sup>nd</sup> = 22 Leo 32

3<sup>rd</sup> = 14 Virgo 55

House Cusps [hand calculated but not interpolated]

MC = 15 Aries 12

11<sup>th</sup> = 24 Taurus 3

12<sup>th</sup> = 3 Cancer 35

ASC = 5 Leo

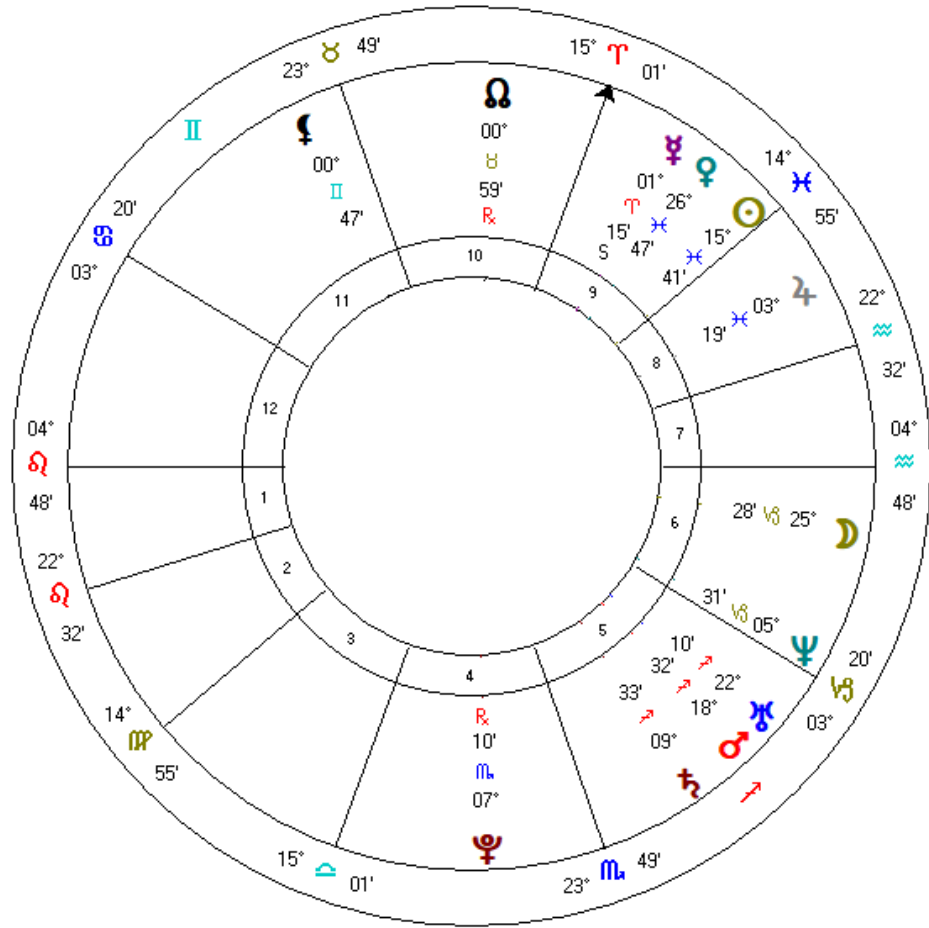
2<sup>nd</sup> = 22 Leo 43

3<sup>rd</sup> = 15 Virgo 5

10  
marks

**2022 Calc Exam Q2**

**Natal Chart**  
 6 Mar 1986, Thu  
 2:50 pm CET - 1:00  
 Paris, France  
 48°N52' 002°E20'  
*Geocentric  
 Tropical  
 Placidus  
 True Node*



**Q2**

Calculate the longitudinal positions of the following planets to within **30 minutes** of zodiacal longitude. All data below is in GMT.

1. Sun:                      2 March 2022                      6.15am  
     Hand Calculation = 11 Pisces 38  
     Solar Fire = 11 Pisces 38
2. Moon                      18 Mar 2019                      2.30pm  
     Hand Calculation = 23 Leo 03  
     Solar Fire = 23 Leo 01
3. Mercury:                10 Dec 2017                      9pm  
     Hand Calculation = 24 Sagittarius 11 Retrograde  
     Solar Fire = 24 Sagittarius 12 Retrograde

4. Venus: 12 Feb 2014 6.45pm

Hand Calculation = 16 Capricorn 10

Solar Fire = 16 Capricorn 10

5. Mars: 22 September 2016 2am

Hand Calculation = 26 Sagittarius 36

Solar Fire = 26 Sagittarius 36

**END OF SECTION 1**



Q1

**SECTION 2 – Total 20 Marks**

**20 marks**

Using the aspect grid supplied find only the following aspects using the stated maximum orbs. **Use only the ten main planets provided and the Nodes.**

Conjunction.....8-degree orb.

Square .....8 degree orb.

Opposition .....8 degree orb.

Trine .....8 degree orb.

Sextile .....6 degree orb.

Quincunx .....4-degree orb.

10 Marks

20 aspects = half a mark each

Using **only the planets and the above orbs**, name one aspect pattern and list the planets that form this pattern.

Q2

**Grand Cross with Moon, Neptune, Saturn and Mercury**

2 marks

**...or any 3 of these planets form a t-square**

What is the Lunation Phase for this chart?

**Disseminating Moon Phase**

Q3

**Convert Moon and Sun to celestial longitude then subtract.**

1 mark

**Moon is 71 28 [ add 360 as can't subtract otherwise]**

**= 431 28**

- Sun 179 27

= 252 01 = **Disseminating Moon [Solar Fire also says the Sun Moon Angle is 252 01]**

What is the short arc midpoint of the Moon and Mercury?

Convert to celestial longitude/add then divide answer by 2 and convert back.

Moon = 11 Gemini 28 = 71 28

Q4 + Mercury = 14 Virgo 49 = 164 49 2 marks

= 235 77 becomes 236 17 then divide by 2 = **118 08.5**

= **28 Cancer 08** [or 09] Solar Fire says **28 Cancer 09**

Q5 Which planets are intercepted? **Moon, Mars & Saturn** 1 mark

Q6 Which planet disposes the Moon? **Mercury** 1 mark

Q7 Name two planets in their dignity [rulership]? Name the planets and their signs. 1 mark

**There are 3: Neptune in Pisces, Venus in Libra and Mercury in Virgo**

Using the nocturnal formula, calculate the Part of Fortune to the nearest degree

Formula: ASC + Sun – Moon: Convert to celestial longitude

Q8 ASC = 8 Leo 11 = 128 11 2 marks

+ Sun 29 Virgo 27 = 179 27

= 307 38

- Moon = 71 28

=236 10 = **26 Scorpio 10** [Solar Fire says **26 Scorpio 09**]



**ANSWERS 2022 CALCULATION SECTION 3 AND 4**

**SECTION 3 – 30 marks**

**Please note: There may be a slight difference in answers in this section depending on which Ephemerides is used. The examiners will allow for this.**

**Q1 Calculate a 12-month Secondary Progressed Moon table for Dianne for 2022, starting from January 1 to the nearest 30 minutes of an arc**

**6 marks**

**ACD date using midnight ephemeris is 1<sup>st</sup> April 1954**

Count 68 days from GMT DOB = 22 September 1954

0 hr. Moon position on this day is 29 Cancer 57 minutes 59 seconds– place next to April 1

Monthly Adjustment using Michelsen 12-hour Moon

Midnight position 29 Cancer 57 min 59 secs

Noon position day before 23 Cancer 23 min 50 secs

**Difference = 6 34 09**

divide by 6 for monthly rate of travel = **1 degree 5 min 41 secs**

so add and subtract from ACD date of **April 1<sup>st</sup> 2022**

Hand Calculations

1 Jan 2022	26 Cancer 40 56
1 Feb	27 Cancer 46 37
1 March	28 52 18
<b>1 April ACD</b>	<b>29 Cancer 57 mins 59 secs</b>
1 May	1 LEO 03 40
1 June	2 09 21
1 July	3 15 02

1 August	4 20 43
1 September	5 26 25
1 October	6 32 05
1 November	7 37 46
1 December	8 Leo 43 27

USING JASON'S CHART – Q2 - Q7

**Jason ACD:** Midnight ephemeris: ACD = 31 1 1968

Noon ephemeris: ACD = 22 May

**Q2 Age of 2<sup>nd</sup> Secondary Progressed New Moon = 54 years of age at 2 Leo 35**

**3 marks**

Using GMT date 1 June 1968 as 0 count down in ephemeris until you reach 2<sup>nd</sup> New Moon = 25 July 1968 at 2 Leo 35

Day for a year therefore = 54 years old.

- Computer: 2<sup>nd</sup> Prog New Moon = 30 July 2022 2 Leo 34

**Q3 Age when Progressed Sun conjuncts natal Moon = 59 years old**

2 marks

Natal Moon = 6 Leo 47; Count down from GMT DOB until Sun reaches 6 Leo 47 (closest 6 53 07) on 30<sup>th</sup> July = 59 years / this may differ depending on ephemeris (29 days in June counting 1<sup>st</sup> June as 0 plus 30 days in July = 59 years)

**Q4 Age Solar Arc Saturn conjuncts natal Venus = 46 years of age**

3 marks

Natal Venus 5 Gemini 65 40

Subtract Saturn 22 Aries - 22 01 =

SA difference 43 39

Sun 10 Gemini 52 +70 52

114 31 = 24 Cancer 31

**Go down ephemeris using GMT DOB as 0 until Sun reaches the required position of 24 Cancer 31 = 46 years old**

**Q5 During 2022 and 2023 Transiting Neptune will trine Jason's natal Neptune.**

**List the exact GMT dates of this aspect.**

**3 marks**

Neptune = 24 Scorpio 43: Dates that Neptune will trine this point @ 24Pisces 43

- 1. 6/7 May 2022**
- 2. 21 August 2022**
- 3. 5<sup>th</sup> March 2023**

**Q6. Using a 1-degree orb, both applying and separating, list the exact GMT periods both applying and separating when Jupiter opposes Natal Jupiter during 2021.**

**Natal Jupiter@28 Leo 11**

**opposing with 1 degree orb = 27 Aquarius11 to 29 Aquarius 11**

**3 marks**

- 23 April to 7 May 2021
- 5 August to 21 August 2021
- 13 December to 24 December 2021

**Q7. Exact GMT date when Jason will experience the FIRST hit of his next Saturn return  
= 13 May 2027**

Natal Saturn 22 Aries 01

Return 13 May 2027

**1 mark**

**Q8. List the exact [GMT] dates and zodiacal degrees of all solar and lunar eclipses for 2022.**

**2 marks**

**Solar Eclipses**

30 April 22 – 10 Taurus 28

25 October 22 – 2 Scorpio 00

**Lunar Eclipse**

16 May 22 – 25 Scorpio 18

8 November 22 – 16 Taurus 01

**Q9. What are the exact (GMT) periods when Mercury is retrograde during 2022?**

**2 marks**

**14 Jan 22 – 3/4 Feb 22;**

**10 May 22 – 2/3 June 22**

**10 Sept 22 – 1/2 Oct 22;**

**29 Dec 22 – 17/18 Jan 23**

**10. Calculate the Adjusted Calculation Date for the following birth data: =**

**11 May 1998**

2 November 1998 @ 10:30pm

5 marks

**Sydney NSW Australia**

**Standard Time Zone -10 hours (daylight savings in effect)**

**Step 1:** Find GMT of birth (subtract/add Standard time Zone Difference)

TOB 10:30 - 1.00 (daylight) = 9:30 pm

21 30 00 – 10 hrs. (GMT adj) = 11:30 on 2 Nov

GMT                    11\_30 00 on 2 Nov 1998

**Step 2:** Sidereal time from ephemeris = 2 44 15 on GMT date 2 Nov 1998

Subtract GMT    11 30 00 (if too small add 24 hours to above figure)

ACD Sidereal time = 15 14 15

**Step 3** Turn back in ephemeris to this time 10 May 1998

**Step 4 Adjusted Calculation date = 10 May 1998 (Midnight ephemeris)**

Or

Subtract GMT from 24.00 hours = 12 30 00

Add Sid Time 2 44 16 to 12 30 00 = 15 14 16 = 10 May 1998 (*during this day sid time moved through 15 14 16 because next day 11<sup>th</sup> sid time is already 15 14 19*)

## SECTION 4 – TOTAL 20 MARKS

Section 4 Answers:

Q1 d Q2 b Q3 c Q4 a Q5 a Q6 b Q7 d Q8 a or c Q9 b Q10 b  
Q11 b Q12 b  
Q13 d Q14 c Q15 b Q16 d Q17 c Q18 c Q19 c Q20 b Q21 c Q22 c Q23 d  
Q24 c  
Q25 a